digivod®

digital video surveillance

User Manual

digivod®

Version 3.0

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1. General

Welcome to digivod gmbh and thank you for choosing digivod®. This manual describes the operation of the digivod® software and its modules. Installing and operating our digivod® software requires general knowledge in handling Windows applications.

1.1 digivod® overview

digivod® is one of the most innovative and most powerful video management software systems on the market and it will fulfill your highest requirements and expectations.

With its modular concept, digivod® allows you to build a highly scalable software system which will meet all requirements for IP video management solutions.

Due to the modular structure of the software and its many options for connecting it to other systems, it provides you with a variety of operation areas which is almost unlimited.

1.2 digivod® editions

digivod® SMART edition /5 or /10

The digivod® SMART edition is available either with 5 or 10 camera licences. The windows based multi-user system contains 2 client licenses. This allows remote access and makes digivod® Smart edition perfect for small and medium-sized applications of IP video surveillance.

Options: web access, IO control, crossline plugin, alarmsensor plugin, people counter plugin for Axis cameras, videowall, server multicast, UPnP control

digivod® BUSINESS edition

The digivod® BUSINESS edition is a windows based multi-user system that comes with 5 camera licenses (expandable), 5 client licenses (expandable), remote access, privacy zones and SmartSearch there by offering you an almost unlimited range of applications for IP video surveillance.

Options: camera licenses, client licenses, Web access, Fast SmartSearch, IO control, SD card recording, crossline plugin, alarmsensor plugin, people counter plugin for Axis cameras, video sensor for outdoor protection, license plate recognition, privacy protection, alert forwarding to guard station via EBÜS, videowall, server multicast, UPnP control, point of sales integration (POS)

digivod® MULTI-LOCATION edition

The digivod® Multi location edition allows to manage several digivod® locations within one central digivod® installation (for chain stores). In addition to that this version can also be used for local video surveillance using the known options. It comes with 1 client license (expandable).

Options: same as digivod® Business edition

digivod® ENTERPRISE Edition

The digivod® ENTERPRISE Edition allows the installation of multiple recorder systems. With this an optimum load balancing as well as a fully-automatic transfer of recording in case of failure of a recorder can be configured.

The digivod® ENTERPRISE edition provides maximum flexibility for expanding installations and for applications with an increased need for data security and availability.

Options: same as digivod® Business edition

1.3 Highlights of the digivod® editions

- 360° views with server-based view correction for Grundig cameras and ImmerVision 360° lens
- Acceptance report
- alert notification e-mails (optionally with snapshot or archive link)
- alert forwarding to guard station via EBÜS (option)
- number of cameras and clients expandable (not for SMART)
- automatic adjusted H.264 live- and archive-transcoding for access via the internet
- automatic cropping in multi views
- any designable multiple views including siteplans and IO ports
- any number of storagesets configurable
- intelligent data base-supported automatic event indexing
- definition of individual response curves for PTZ joysticks
- digital zoom / digital PTZ for all cameras
- direct connection for analog cameras and HD-SDI cameras (option, as hybrid recorder)
- direct control of display modules
- direct creation of new PTZ positions using observer
- genuine multi-core support
- integration of external digivod® sites (Multi-Location edition)
- one-click installation (also via the internet without administrator permissions and without additional port releases)
- Embedded OS for bundles, recorder and Hybrid recorder
- powerful event and alert management with flexible set of rules
- event-based, scheduled and manual recording
- advanced control by IR remote control and PTZ joystick
- Fast SmartSearch (extremely quick search for motion in the archive on the basis of archived live analyses (option, not for SMART)
- flexible user management with individual permissions to single camera functions, live access, archive access, PTZ control, view access, IO port access, alerts, administration access
- powerful single- and packet export for video data including offline player (optionally encrypted)
- floating licenses
- free definable hotkeys
- freely definable start and standard views for each monitor
- large number of native supported cameras (see Supported manufacturers)

- integration of camera-internal video sensors (motion detection)
- integration of camera-internal plugins (crossline detection, alert sensor plugin and people counter plugin) for Axis
- integrated backup function for video data and configuration data
- integrated IO port control for cameras and IO modules (option for Axis and Vivotek)
- integrated support functions
- integrated cascadable siteplans containing dynamic status visualization and alarm visualisation as well as direct access to cameras, views and IO ports
- Point of sale connection (POS) (option, for BUSINESS and ENTERPRISE)
- license plate recognition (including black- and whitelist) (option)
- combined live and archive images of the same camera in multiple views
- lipsync bidirectional audio support (AAC encoding)
- manual and automatic bookmarks with savelock option
- multi recorder operation (multi recording) for load balancing and / or automatic failover (ENTERPRISE only)
- ONVIF compatibility
- optional 4-eyes login
- periodical events
- PTZ control via joystick, joystick simulation, virtual joystick, mouse and freely definable control keys
- PTZ tours with schedule control
- QuickSearch for fast archive searches (not for SMART)
- SD card recording (option)
- Server multicast (Option)
- Serverbased motion detection for all cameras (Option)
- serverbased privacy protection for scrambling moving objects (option, not for SMART)
- serverbased privacy zones (option, not for SMART)
- intelligent serverbased video analysis for outdoor protection (realtime) (option)
- observer installation as single application
- powerful archive research via SmartSearch (not for SMART)
- snapshot export (optionally watermarked)
- supports H.264, MPEG4, MJPEG, MxPEG
- supports USB cameras
- UPnP control (optionally also UPnP media server) (option)

- multiple remote access options via LAN and via the internet
- Video status monitor as own application running in windows info area
- Videowall (option)
- viewports (image sections) usable as single views or PTZ positions based on one single video data stream
- virtual IO ports for setting up logical event connections
- full megapixel support
- automatic camera tours (guard tours)
- web access with any HTML5 compatible browser, no additional software required (option)
- schedule-controlled, stream-based camera operation

1.4 What‘s new in digivod® version 2.1?

Event based and time controlled recording

Schedule based camera functions have been extended to event based recording. This new functions offers an option to define timeframes, where recording is only archived, when documenting an event.

Extended context menues for quicker navigation

New context menues can have been implemented to be used by right mouse click. This allows a quick navigation changing between views, cameras and tours.

New implemented viewports usable as views or PTZ positions

Viewports (image sections) of single cameras can be defined as single views or PTZ-positions. This allows the optimized usage of multi-megapixel cameras.

Enhanced user rights management

Single users can not only have access rights to certain cameras but also to certain views.

Improved export function

When exporting video data from multi-camera views single cameras can be selected. The maximum filesize of exported video files can be predefined for optimum fit to storage media e. g. CD or DVD.

Custom icons for views

The basic layout of user defined views is now shown within the icons in the navigation tree.

Camera maintenance

This new functions offers an efficent and quick way to maintain the most important camera parameters within one screen for all cameras. Cameras can be temporarily enabled or disabled.

Integration of other camera manufacturers

IP cameras from Pelco (Sarix models only) and Basler have been integrated.

Optimized for multi-megapixel cameras (HDTV)

Cameras using HDTV or higher resolutions are coming up more and more. In version 2.1 digivod® has been optimized for multi-megapixel operations.

The speed of visualisation has been improved. Accessing the archive is four times faster than before. The software automatically adapts to the available bandwidth when playing video data from the archive.

Optimized remote access

When the observer accesses to a remote digivod® server via the internet the use of the available bandwith now is even better. Already before accessing to the archive playing parameters are optimally adapted to the available bandwidth.

Digital watermarks in exported screenshots

To protect against tampering and to ensure their authenticity exported snapshot files can be signed with an individual watermark file (.jpg or .png). The transparency level of the watermark is variable.

New quick access menu

The observer main menu now contains a quick access button to jump back to the last submenues with one single mouse click.

1.5 What‘s new in digivod® version 2.2?

Quick event preview

Moving the mouse pointer across an alert line in the alert lists will automatically open a preview of triggering event.

Scaleable and freely movable timeline

In its version 2.2, digivod® offers you a completely refurbished timeline for player control, allowing you to set four different timeline scale levels using the mouse wheel. Holding your left mouse button, you can easily move the entire timeline in both directions.

Including external video sources (Multi-Location edition only)

External video sources (e. g. other digivod® systems) can be integrated into our Multi-Location Edition in such a way as to allow for using cameras and archives of the external source as well as locally installed components. This feature helps you to build branches networks, allowing videodata of all external branches to be summarized and analyzed in one single company headquarter.

New event types

Further event types have been added under ‚Alert Management‘ which allow to you monitor the availability of external video sources and integrate the alert sensor plugin for axis cameras, among other things.

Integrated automatic configuration backup

System configuration data may be backuped automatically (daily) or manually, either in a data directory or on a USB dongle. Optionally, you can choose to have your backup data encrypted.

Increased data security

Sensitive data will be stored and transmitted in an encrypted format.

Integrated license plate recognition using black- and whitelists

One further option comprises a module for automatic recognition of license plates. It can safely recognize alphanumeric characters as little as 16 pixels high in the four most common fonts (Latin, Arabic, Cyrillic and Chinese). For this purpose, you can select relevant approval or blocking lists (or: ‘blacklists and whitelists’) under ‘Alert Management’; these lists define which license plates trigger alerts (and which do not).

Combined siteplan displays

By integrating siteplans into multiple views, all the relevant digivod® information of an object being monitored can be displayed together.

Single application installation of observer

As an option, digivod® observer can be set up to start immediately during login of a Windows user using his or her login data. When exiting the observer program, this user will be logged off again automatically. This procedure will provide optimum protection agains misusing your Windows System.

One-click installation (optionally via the internet)

This installation method – also called ‘one-click deployment‘ – lets you install your digivod® client software by simply opening up the digivod® server in Internet Explorer with just one single mouse click. This will help you to reduce your administrative activities to a minimum, especially when using larger installations with many clients and setting up branch systems (see ‘Multi-Location Edition’ in chapter digivod® Editions).

Alert notification e-mails with integrated archive link

Archive links contained in automatic alert notification e-mails will enable the e-mail recipient to directly start the digivod® observer and jump to the event triggering the alert.

Encrypted export / multiple export with offline player

Our new export list allows you to compile any desired archive data into one combined export package. Optionally, this export package may also be saved in encrypted form. The digivod® offline player, automatically included in each export package, allows you to display your export package in any windows systems using digivod® observer. If you wish to burn an export package onto CD/DVD, you can do so directly from your digivod® program.

Alert display in siteplan

In case of an incoming alert, the symbol for the camera triggering the alert will change into your previously defined alert color.

1.6 What‘s new in digivod® version 2.3 and 2.3.1?

SmartSearch

With our new feature ‘SmartSearch‘, you will be able to subsequently apply server-side video analysis on video data which have already been archived. You can position the area to be analyzed freely within the camera’s image. SmartSearch will generate an event list that can be evaluated while the analysis process is still running.

Integration of other camera manufacturers

IP cameras from Panasonic and Vivotek have been integrated.

Integrated support for fixed channel cameras

The configuration and control of cameras with fixed multi-channels (e. g. Panasonic) has been integrated into the digivod® administration.Channel parameters can now be visualized and set directly from the administration interface

Bookmarks

In each live- and archiveview named bookmarks can be set manually. Bookmarks offer a quick way to find marked video data.

Integrated intelligent video analysis

Our optional video analysis – server-based and completely integrated into digivod®‘s program surface – offers a real time video analysis of moving object with a free scalable object size. Alarms can be triggered by passing virtual fences as well as by movements in freely defined analysis areas (ROI).

Recognized objects will be marked directly within live images of analyzed cameras. Thanks to their ‘learning capacity‘, the analysis algorithms used in this program will automatically fade out cyclic interferences (e. g. leaves swirling in the wind, recurring mirrorings, reflections, shadows and scattered light, or differences in brightness due to illumination changes), thus reducing false alert rates to a minimum.

ONVIF compatibility

The open industry forum ONVIF was founded on November 25, 2008. It is the goal of ONVIF to develop a global standard which may serve as a common basis for any components of an IP-based video surveillance system, irrespective of their individual manufacturers and brands. Our new digivod® version 2.3 will support all cameras compatible with ONVIF.

For more information on ONVIF please go to www.onvif.org

Enhanced user rights management

The new enhancements of the user rights management offer a more detailed assignment of single rights to access to cameras and camera functions. Also the options of viewing and processing of alerts can now be granted very detailed.

Integrated automatic video backup

Video data of each day may be automatically backuped daily. The backup also contains the digivod® offline player and can be used on each Windows PC.

Enhanced schedule control

In addition to camera schedules now there are also schedules to control the rules.

Motion detection for single zones

Motion detection alarmrules can respond separately to up to four different zones of movement.

1.7 What‘s new in digivod® version 2.4?

New module: web access

This module allows to HTML5 capable browsers direct access to video images (live and archive) and alarms. Web access is optimized for mobile devices like iPhones and Android phones.

360° ImmerVision® support

ImmerVision® lenses provide 360° views with standard cameras. In addition to 360° views it also offers a digital PTZ function within a view.

Cameras equipped with ImmerVision® lens are automatically detected in digivod®. The different options (overview, virtual PTZ, viewport) can be integrated in digivod® views like viewports.

Views and areas within siteplans

In addition to cameras also views and other siteplans can be integrated into a siteplan. It is possible to create a link area for each object in the siteplan that connects object and area. This allows a quick navigation between cameras, views and siteplans and it offers a direct access to event triggering video data from the siteplan.

Snapshot optimization

Brightness and contrast of snapshots can be corrected before saving. This function can be used to enable optimum picture quality.

Integration of other camera manufacturers

IP cameras from Everfocus have been integrated.

1.8 What‘s new in digivod® version 2.5 and 2.5.1?

Advanced storage configuration

Several separate storagesets to store video data can be created and managed. Each storageset has own settings for free memory size, archive duration and length of pre- and post-alarm.

64bit support

digivod® observer automatically detects whether it is running in a 32bit or in a 64bit environment. Especially when using HD cameras it is recommended to install digivod® on Windows 7 64bit version.

Integration of other camera manufacturers

IP cameras from Cohu, Mobotix, Visicom and the BIP2 models from Basler have been integrated.

Restructured system state display

The system state display is now organized thematically in tabs. In a concise form, it now contains more detailed information about the system.

1.9 What‘s new in digivod® version 2.6?

Improved PTZ control and setting of PTZ parameters

PTZ-controlling via mouse and via joystick has been improved. The PTZ position menu now contains parameter curves to define indivudal pan/tilt-speed and zoom-speed when using PTZ joystick.

Freely definable default views

It is now possible to define a default view for each screen. This will automatically be displayed after program start and after another view has been closed on that screen.

4-eyes login

As an option a user account can be extended to 4-eyes login. This requires two independent login passwords to login.

Automatic alarm view control

Alarm views that were opened automatically can now be closed by schedule. Alarms to be confirmed will be automatically displayed in the incoming order. Alarms that do not need a comment will be confirmed automatically. This increases the security of alarm visualization and reduces the operators workload to a minimum.

Enhanced IO handling

All IP based IO modules from Axis as well as IO ports on Axis cameras are supported now. Certain rules can be used to trigger IO events. The IO port state can be visualized and modified within site plans. A cross IO view displays all IO ports and their parameters. IO port states can also be modified directly from this view.

New interface for web access

The optional Web Access module has an entirely new interface. This now can display multiple views and it allows the control of PTZ cameras. Previews for cameras and alarms are available now. Swiping (touch devices only) allows to switch between cameras and alarms.

Enhanced analysis options using Crossline Detection

Crossline Detection, an option for Axis cameas, has been integrated in digivod®. This camera based video analysis detects moving objects that cross a virtual line. It will work in most indoor and outdoor installations and in variable lighting conditions. It is well suited for many situations, including video monitoring of building entrances, loading docks, and parking lots.

1.10 What‘s new in digivod® version 2.7?

Integrated SD card recording (Axis and Vivotek)

Some cameras offer SD card recording as an option to store video data. This type of recording reduces network load and it also allows to integrate cameras that have a slow or instable network connection (e. g. via WLAN). Video data that has been stored on SD card will also be available after network failure as well as after defect or tampering of the video recorder. This video data will automatically imported into digivod® (periodically or manually) and will then be available like regular archive recordings. All archive functions (e. g. Snapshots, SmartSearch, Playback at different speeds, Export) can also be used for imported SD card recordings. SD card recording may be used as a substitute or in addition to regular digivod® recording.

Multi recording

The new Multi recording option allows nearly any scaling of the digivod® system. Up to now one central digivod® recorder was able to store video data to different storagesets. Multi recording allows to combine several digivod® recorders running on different computers into one system. Each of these recorders can manage any number of storagesets. Multi recording enables a load balancing which may be required e. g. for a large count of video analyses or a very large count of cameras. Multi recording can increase the reliability of the overall system.

Optimized transmission of video data by H.264 transcoding

For optimal use of bandwidth in multi location environments as well as for observer access via the internet the digivod® server will transcode live video data to H.264. The framerate is automatically adjusted to the current capacity of the client, server and connection.

Optical identification of archive views

All archive views will now be marked with an orange frame. So you know at a glance whether there is a live view or an archive view.

DirectX rendering

By using DirectX features of modern graphics adapters the playback of video data will be smoother.

Improved PTZ options

Also PTZ tours can now be controlled by schedule. The PTZ parameter curves pan/tilt-speed and zoom-speed that have been introduced with version 2.6 are now stored per camera and per user.

Quick archive access via calendar

The targeted playback of the video data of a certain day is now available directly from a day-calendar in the recorder control. Days for which archived video data is available wil be marked in the calendar.

Advanced schedule control

Exceptions can be added to all schedules (camera settings, rule control, PTZ control). This may be used to switch to weekend-function during a single holiday when using a weekday/weekend-schedule configuration.

Timeline event previews

Like in the alarmlists there will be a preview of the triggering event when mouse is over an alarm marker in the timeline.

Enhanced analysis capabilities by Aimetis people counter

The optionally available Aimetis people counter plugin for Axis cameras has been integrated digivod®. When installed on the camera this plugin is able to count people when crossing a virtual line. The results of this counting can be retrieved by digivod® every minute, every hour or daily. They will be displayed in the alarm management and can be exported for further analysis.

Camera specific video backups

Now you can select the cameras that shall be included in the automatic video backup. The data volume of video backups is kept to a necessary minimum for the particular application.

New view templates

The creation of new views is facilitated by an extension of the template catalog with new field-tested templates. Additional preview icons show the layout of the respective views with the selection.

RTP over TCP

For cameras that offer RTP over TCP for the video data transfer, this option can directly activated from the camera administration. RTP over TCP provides a greater transmission reliability for the particular connection. This might bring advantages when camera connection is via the internet.

1.11 What‘s new in digivod® version 2.8?

Integration of other camera manufacturers

IP cameras from Brickcom, Grundig und JVC have been integrated.

H.264 archive transcoding

In multi-location environments and it observer-accesses via the Internet archived video data will be transcoded into H.264. The transcoding resolution is automatically adjusted to the current resolution of the target clients.

Privacy zones

Privacy zones in digivod® allow the masking or pixelation of single image areas to hide e.g. neighbour properties or public areas from monitoring. Unlike privacy zones defined inside of a camera the digivod® privacy zones don’t modify or reduce the video data. This allows to deactivate the privacy zone in case of a legitimate interest e.g. after a burglary event. The deactivation requires a appropriate permission that can be secured via the 4-eyes login.

Privacy Protection

The optional privacy protection module extends the functionality of privacy zones with a dynamic pixelation of moving objects. The movement itself remains recognizable but an object identification is not possible. In case of an event a user with appropriate permissions can access the unblurred video data. Thus enables digivod® to implement a data protection compliant video surveillance.

Improved automatic camera search

The automatic camera search can directly be started at the first login after a new installation. It finds all supported cameras and it can set the master password in brand new cameras on request. This eliminates the need to change the factory password manually. After the search cameras can be imported by a single click into the system. This immediately starts the recording – it’s that simple!

Fast SmartSearch

So far SmartSearch was able to search for motion in the video archive. The optional module Fast SmartSearch already analyses video data while recording and stores the analysis results. This allows a flexible and quick motion search even over very long periods of time.

Automated Login

For a quicker start digivod® Observer now can store logon data.

IO control via web access

The state of IO ports is visualized in digivod® web access and IO ports can directly be switched.

Expanced ruleset for alarm management

The digivod® event and alarm management has been extended by several actions. With "alarm upload" it is possible to transfer videos or single snapshots to a remote server, e.g. in a security center. The frame rate of the transmitted video data can be freely selected.

The new "Manual Recording" action allows an event-driven start and stop of the recording for single or all cameras. Together with the new rule activation/deactivation via an IO port (e. g. by a key switch) this can be used to switch the system from gatekeeper operation (daytime) to security center operation (nighttime).

Integration in EBÜS

Another new feature is the integration of digivod® into the EBÜS system that is frequently used in control centers. EBÜS is a comprehensive video management solution that integrates video management systems from different.

1.12 What‘s new in digivod® version 2.9?

Integration of other camera manufacturers

IP cameras from Canon, IQeye und LG have been integrated.

digivod® recorder with direct connection to analog cameras and HD SDI cameras

Until now analog cameras could be connected to digivod® only via video servers. Version 2.9 is now also offered as an integrated digivod® recorder solution. This allows the direct connection of analog cameras and HD SDI cameras. It is very simple to replace an existing analog CCTV system with a digivod® recorder. Also hybrid systems using analog cameras and IP cameras are possible. All digivod® functions are available for all types of cameras!

UVV-Kassen certified digivod® recorder

digivod gmbh offers an integrated recorder system (hardware and software) that is certified by the german banks regulation UVV-Kassen. This recorder offers the direct connection to up to 16 analog cameras. In addition to this also IP-cameras can be integrated as usual with digivod®.

User definable hotkeys

Many operations of the digivod® observer can now be triggered by keyboard shortcuts (hotkeys). The keyboard assignment can be set individually for each client.

Advanced control by IR remote control and PTZ joystick

With the IR remote control that comes with the digivod® bundles but also with many other IR remote controls and with the command buttons on PTZ joysticks important operations of the digivod® observer can directly be triggered. The normal operator use of the digivod® observer does not longer require a keyboard. The command assignment to each key can individually be defined per client.

Fast archive search with QuickSearch

The new digivod® Quick Search now offers another very powerful and quick way to search the archive to changes in the observed scenario. It bases on a thumbnail grid with up to 36 thumbs taken from a user-definable time slot within the archive. With a few clicks the user can zoom into this time slot to delimit the searched video area.

Advanced licenses

The digivod® licensing model now includes important additional options. Update certificates with different run times are automatically considered. Updates do not longer require a new license file. It is possible to generate fully functional temporary licenses as well as restrictive training licenses and demo licenses for internal distributor use.

Enhanced PTZ control

The PTZ position menu has been expanded and improved. The new virtual joystick can directrly control the camera. PTZ presets can now be set directly from the PTZ position menu.

Improved digital PTZ for all cameras

The digital zoom function that is available for all cameras in live and archive mode will now automatically center the zoom in area. The desired part of the image can be positioned more quickly.

Improved support functions

For optimal support it is now possible to generate a .zip-file that contains important system information with a single mouse click. The advanced support functions also provide an easy was to define the startup behavior of each single client. It is possible to reduce the user permissions so that only the digivod® observer can be accesed and that windows is inaccessible for the user. For remote support the TeamViewer can be started directly from the digivod® observer.

digivod® video status monitor within windows info area

The new video status monitor opens a compact real time status display of all important digivod® components directly from the windows info area. It allows the monitoring of local digivod® servers as well as the monitoring of remote digivod® servers from any client. Current status changes are displayed automatically, failures of single system components are color marked. The digivod® observer can directly be started from the video status monitor.

Windows 8 support

The digivod® client and server components now support all current PC versions of the new Microsoft operating system Windows 8.

Auto-cropping in views

As an option each single camera can be set to automatic cropping to get an optimum display area without any distortion. The often unused or even disturbing image parts in multiple views (black borders) can be permanently eliminated with one click.

Improved system log

For a faster and clearer evaluation of the internal digivod® logs the display can now be grouped by simple click on message-triggering components.

Manual recording control from the camera view

Cameras with manual controled recording can now be switched on and off with a simple click directly in the camera view. The current recording status is color marked.

1.13 What‘s new in digivod® version 3.0?

digivod® ENTERPRISE Edition

The new digivod® ENTERPRISE edition is the only digivod® edition that offers the possibility of multi recorder operation. With this an optimum load balancing across several recorders (computers) as well as a fully-automatic transfer of recording in case of the failure of a recorder (failover) can be configured.

Multi recording with automatic Failover

Multi recording, that is the distribution of the video recording across several recorders, with automatic failover is the core function of the new digivod® ENTERPRISE edition.

Any number of recorders having any number of storagesets can be integrated in an overall system. In this way digivod® makes an optimum load balancing, the virtually unlimited expansion and the installation of very big redundant systems possible. For every storageset a failover storageset can be defined, on which the recording is to be continued in case of a failure. Optionally, it is possible to define a lower resolution and / or frame rate for each camera for the failover scenario in order to prevent overtaxing of the recorder that is supposed to take over.

As soon as a failed recorder is available again, digivod® automatically switches all relevant storagesets back to normal operation. Video data archived during the failover operation are of course directly available for the digivod® observer in normal operation - as well as the video data that were archived before the failover operation (provided it is not physically lost due to disk damage).

digivod® bundles and digivod® recorder with embedded OS

The range of available digivod® bundles has been extended and updated. What is new in the range is the offer of compact housings with powerful hardware for the SMART5/10 bundles as well as recorders and hybrid recorders on various configuration levels.

By using embedded OS on these systems, the operation becomes simpler and more secure for the final customer and the operator. The underlying Windows system no longer appears, faulty operations, manipulations and sabotage are practically ruled out. As a matter of course, the familiar Windows environment will continue to be available for administrators.

digivod® Hybrid recorder

The new digivod® hybrid recorders offer the full digivod® functionality, on request with all available options for up to 96 analog cameras or 24 HD-SDI cameras and additional IP cameras on one server!

Floating licenses

The new digivod® hybrid recorders also allow the direct connection of analog cameras and HD-SDI cameras, in addition to the familiar operation of IP cameras. In digivod® the available camera licences are generally independent from the camera type, i. e. an existing analog camera on a hybrid recorder can be replaced by an IP camera any time. This makes a floating transition from analog technology to IP technology possible without any extra cost.

Point of sale module (POS)

With the new point of sale module the data of the receipts created at the checkouts (points of sale) can be consolidated with the checkout-related video data in the video archive. Unrestricted analyses, e. g. by checkout number, product type, items, make it possible to research unusual events retrospectively.

Videowall

Videowalls of any number of individual monitors can be directly controlled by one (or several) digivod® operator workplaces. So, when setting up digivod® based video control stations, very big systems with many cameras can be represented in a well-arranged manner.

digivod® as UPnP media server

On request, UPnP compatible display units (e. g. current smart TVs) can access the digivod® server directly and retrieve alert images or camera live views there. In this way accessing the video system via the television set by remote control is possible.

digivod® support for display panels

With digivod®, output devices connected to the network (e. g. customer displays in the retail trade) can be accessed directly. Depending on the specification, the output device can be connected directly (e. g. a smart TV), via a "digivod® display converter box" (for simple customer displays) or via a video wall client (for high-quality customer displays with several monitors, if required).

Support of USB cameras

USB cameras connected to the digivod® server can now be integrated in all editions. Also the cameras integrated in notebooks are usable for digivod® in this way and make it possible to create micro installations - even without connecting to a network (see Notes on the use of USB cameras)

Virtual IO ports

One possibility the expansion of the digivod® IO control by virtual IO ports provides is to connect incoming events logically before they trigger an alert, where applicable.

Example: Camera 1 reports a motion, but an alert is to be triggered only if camera 2 also reports a motion within the next 5 seconds.

Server Multicast

To reduce the load on the cameras, a digivod® server makes live views available centrally for all clients. If a lot of clients retrieve live images from the digivod® server simultaneously, the new server multicast operation can effectively prevent an overload of the server and the network, providing all network components support this operating mode. In this operating mode the live image of the cameras is provided one-time in the network by the server as multicast stream.

Periodical events

The new event type "periodical event" allows the cyclical execution of all available rule actions, e. g. moving into certain PTZ positions, switching of IO ports or the sending of e-mails with current camera images. In combination with the schedule control, actions can also be executed at defined times.

Combined live and archive display in multiple views

Especially in case of automatically faded-in alert views, it can be useful for the quick intervention of the guard if, in addition to the image triggering the alert, the current live image of the same camera is displayed.

Native integration of Grundig 360° camera

The native integration of the latest 360° camera by Grundig makes it possible to use this camera with full PTZ functionality and perspective-corrected views. What is special is that by the native implementation on the server side the PTZ functions are available both in live view and in archive view.

Alert lists and system status as part of multiple views

By integrating alert list and current system status in a multiple view, an individual and very concise overall overview of a digivod® installation can be created. Position and size of all integrated elements continue to be completely without restriction and can be adapted to the needs of the user both when defining the view and when using it.

Enhanced export functions

As the various digivod® export functions are only rarely used in many systems, their usability has been optimised in such a way that also inexperienced users can handle them easily.

Acceptance report

For those who set up a digivod® system as well as those who operate it it is important to clearly document all system parameters at a defined point of time (e. g. acceptance / handover). With the new acceptance report and the camera report camera settings, views and other important details are summarised in a printable format at the push of a button.

1.14 Copyright

Trademarks

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1.15 License agreement

Please find below our contract terms for the use of our digivod gmbh software products. You as the customer are required to agree to these conditions before being able to install and use the product. Should you not agree to the terms, please do not install this software product but return the software, and any accompanying material as well as any printed material and its packaging, within 30 days after your purchase against full refund of your payment. If you purchase, or have purchased, the software product as a download, instead of returning the material you will simply need to cancel the download and delete all files which have already been downloaded.

GENERAL LICENSE CONDITIONS of digivod gmbh

1. Definition of terms

1.1 'Product' describes the purchased version of the digivod software in its object code and all updates according to your software license agreement.

1.2 'Updates(s)' describes: (a) new versions of the products which digivod gmbh makes generally available to those customers who have paid the current software maintenance fees, further including extensions and/or program enhancements; (b) bug fixes, patches, workarounds and program changes; (c) new point releases; und (d) new major releases. The name of the corresponding update and its numbering will be irrelevant regarding its qualification as an update. Within the scope of software maintenance, the customer shall not be entitled to receive new or self-contained products which digivod gmbh may opt to offer to their customers only against payment of a separate fee.

1.3 'Software maintenance services' are services which digivod gmbh offers according to their current maintenance conditions.

1.4 'Documentation' describes instructions and user manuals which digivod gmbh makes generally available for their products, either in printed form or in digital form and in its valid version, as well any updates hereof. The parties agree that digivod gmbh shall be entitled to deliver the documentation solely in digitalized form and that the delivery of additional printed documentation shall only be owed if the parties have agreed to this expressly and in writing on their respective order form.

1.5 'Named user' describes natural persons specified by the customer who are using the software subject to this contract within the framework of their employment or their assignment.

1.6 ‘License area’ describes the area to which the right of use applies; in this case, the territory of the European Union.

2. Software license

2.1 Usage authorizations According to this contract, digivod gmbh grants the customer a non-exclusive right to use the product within the license territory solely for his own internal business operations as follows: (a) to use the product within contractual limitations according to this agreement; (b) to use the documentation solely to support the customer in his legitimate use of the license products; (c) to copy the licensed products and documentations only to the extent which is required for their proper use; and (d) to produce an appropriate number of copies of the product and documentation solely for the purpose of archiving, for failure protection or to restore the data after a system failure. The customer shall ensure that the produced copies will bear the same digivod gmbh property right notes as the original copy. For all copies, the same use limitations will apply as for the original product. The customer shall enter all copies of the product and their corresponding depository into a written list which he will keep up-to-date at all times, and he shall make this list immediately available to digivod gmbh upon request. The customer shall be obliged to protect the products from unauthorized access of third parties.

The customer may use the software on any hardware which is available to him. However, should the customer change his hardware, he shall have to delete the software from his old hardware. Any concurrent storing, saving or using of the software on more than one hardware shall be considered illegal. If the customer wishes to use the software on several hardware configurations at the same time, for instance by several employees, he shall have to purchase a correspondingly higher number of program packages.

The use of the licensed products within a network or any other multiple station PC system shall be considered illegal if this will allow concurrent multiple use of the program. If the customer wishes to use the products within a network or any other multiple station PC system he shall have to prevent any concurrent multiple use by deploying an access protection mechanism or, alternatively, he may pay a special network fee to digivod gmbh; this amount will depend on the numbers of users connected to the PC system. The individual network fee which needs to be paid shall be immediately communicated to the customer by digivod gmbh as soon as the customer will have informed digivod gmbh in writing about his intended network use including the number of connected users.

The use of the product within such a network or multiple station PC system shall only be admissible after full payment of the network fee.

2.2 Decompiling, reverse engineering The customer shall not be entitled to assemble or to decompile the products or to translate them into another code form in any other way. If necessary, digivod gmbh shall make the required information available to the customer to enable interoperability between the products and another software.

2.3 Modifications Any translation, adaption or any other kind of modification of the licensed products, including the creation of any works derived thereof, shall be exclusively reserved to digivod gmbh. The right of the customer to correct errors, however, will remain untouched if and insofar as such an error correction will be necessary in order to use the products as intended. In this context, digivod gmbh would like to expressly point out to the customer that even minor changes to the product might cause major, unforeseeable errors in the products and, possibly, in the system environment. Therefore we expressly warn the customer not to modify our licensed products without authorization; digivod gmbh shall not assume liability for any risks resulting from such changes.

2.4 Sublicensing The customer shall not be entitled to market, to sell, to sublicense, to transfer or to rent the products to third parties unless expressly agreed upon in writing. The right to use the product may only be transferred as a whole. In case of sale or transfer of the product, the customer shall hand over all product copies he made to his customer and delete any copies not handed over which may have been left on his computer. He shall then confirm to digivod gmbh in written form that he deleted the software.

2.5 Start and duration of usage rights The customer’s rights to use the product will start on the start date of the license indicated in the contract and shall be granted permanently, subject to full payment of the purchase price.

2.6 Copyright Any copyright or other material rights in digivod gmbh products, documentation and services within the scope of software maintenance according to clause 3 will be reserved to digivod gmbh and their suppliers and licensors including any rights in patents, trade marks, business secrets, and confidential information.

3. Software maintenance

By filling in the maintenance order, the customer may order additional maintenance services available for the maintenance level PROFESSIONAL. The exact contents of this maintenance order and the relevant contract conditions it will be based on will result from digivod gmbh‘s general terms and conditions for maintenance services.

4. Payments

4.1 License fees The customer shall pay the purchase price mentioned in the software contract in return for the license.

4.2 Maintenance fees The amount of the maintenance fees will be based on the relevant maintenance level agreed upon (PROFESSIONAL or ENTERPRISE). If the customer has ordered maintenance services for the first time, his corresponding maintenance fees for the first contract year will be stated in the contract. For each following extension period of the maintenance contract, any relevant maintenance fees will be leveled according to digivod gmbh’s current price list valid at the corresponding extension date. They shall to be paid in total and in advance for the entire contract year.

5. Defects of quality and title

5.1 Definition of ‘defect of title’ The products, as well as an updates delivered within the scope of the maintenance contract, shall be free from defects of title, provided there are no rights of third parties which oppose to the use agreed upon in this contract.

5.2 Definition of ‘defects of product quality’ The products shall be deemed free from quality defects if they provide all the functions which have been listed in their documentation valid at the time of delivery when being used within their supported hard and software environment as described in the documentation. Any workarounds and updates which have been delivered to the customer in compliance with this contract shall be considered free from quality defects if they provide all the functions which are described in their documentation which had been valid at the time of delivery of this workaround or update, and provided they were used in a hardware and software environment as intended and described in such documentation.

5.3 Supplementary performance If a third party intends to assert claims based on a defect of title, or if there is the risk that a third party might assert such claims, digivod gmbh may, upon their choice, either grant the customer the right to continue using the product / the update in a way as agreed upon according to the terms of this contract, or replace the product / the update by another PC program which allows its contractual use in a comparable way, provided that such replacement will be reasonable for the customer considering the interests of both parties. Alternatively, digivod gmbh may choose to modify the product / the update in such a way as to remove the defect of title, or the risk of such, while the product / the update will simultaneously comply with any requirements of its contractual use.

5.4 Customer's duty to cooperate During his corresponding warrantee period, the customer shall inform digivod gmbh immediately about any occurring quality defects and describe the type of quality defect and the program process during which the quality defect occurs. These notifications of the customer shall be provided according to digivod gmbh's formal requirements. The customer shall support digivod gmbh, to a reasonable extent and free of charge, in determining and removing the quality defect. In particular, the customer shall make any data information and files available which will be required in order to remove the corresponding quality defect. He shall furthermore take any required measures on his part, in particular install a modem connection to his servers, so that digivod gmbh can access the inadequately working products or their corresponding system environment within the scope of remote maintenance works. In case of a defect of title and / or a quality defect according to clause 5.1 and 5.2 above, the customer shall support digivod gmbh to a reasonable extent in fending off any claims of third parties. He shall in particular (a) inform digivod gmbh immediately in writing if a third party approaches the customer claiming that the contractual use of the product / updates provided by digivod gmbh infringes upon his rights, (b) not make any statements towards third parties which might be used to impair digivod gmbh's position, and (c) entitle digivod gmbh to assume sole control of the dispute with the third party, both for judicial and extrajudicial matters.

5.6 Exclusion of claims for defects of title and quality digivod gmbh will not be held liable if the claims which the third party is putting forward are based on one of the following circumstances: (a) a connection of the product / updates with installations, devices, firmware or computer programs of other manufactures which have not been delivered by digivod gmbh in their own name and their own account, and/or for which digivod gmbh did not expressly allow this particular connection and/or for which no information obligation on the part of digivod gmbh warning to refrain from using such connection has been neglected or infringed; (b) a modification of the products / of the update by the customer or a third party commissioned by him; (c) the exceeding of the agreed period of use for the product / the update; (d) the failure of the customer to install, or to have installed in the past, any of the changes, enhancements or updates offered by digivod gmbh even though digivod gmbh expressly requested the customer to do so by pointing out possible risks if failing to comply with this request and even though it would have been reasonable for the customer to do so, considering both parties' interests; or (e) if digivod gmbh was asked to implement any customized specifications, concepts or instructions by the customer.

5.7 Statue of limitation for quality defect claims Any claims resulting from quality defects held by the customer shall come under the statue of limitation after one (1) year past delivery. This, however, shall not apply if digivod gmbh fraudulently concealed the corresponding quality defects or if digivod gmbh assumed liability for quality.

5.8 Other exclusions of liability Within the frameworks of this software license, digivod gmbh shall not assume any liability for the products (a) fulfilling any special requirements of the customer or (b) being executable in a specific system environment as intended by the customer (except for those which are expressly listed in the documentation).

6. Limitation of liability for data loss digivod gmbh shall not be liable for any recovery of data unless digivod gmbh intentionally or grossly negligent caused the destruction of this data, and provided the customer made sure that this data can be reconstructed with reasonable efforts from machine readable data material. In this case, liability for data loss shall be limited to typical recovery expenditure for restoration from backups made at regular intervals according to the risk involved.

7. General limitation of liability

7.1 digivod gmbh shall be liable for damages to persons and for claims arising from the German Product Liability Act within the scope of legal regulations.

7.2 Apart from that, digivod gmbh shall only be liable for further damages insofar as these arise from intent or gross negligence on the part of digivod gmbh's legal representatives or agents. Furthermore, digivod gmbh shall also be liable for slight negligence in case of express warranty, and if breaching essential contractual obligations in which fulfillment the customer may particularly trust.

7.3 In case of slightly negligent breach of essential contractual obligations, as well as for gross negligence on the part of vicarious agents who are not senior executives, the liability of digivod gmbh shall be limited to the amount of the typically foreseeable damage.

7.4 Apart from that there shall be no liability on the part of digivod gmbh for cases of slight negligence, irrespective of legal reasons.

7.5 Any liability for subsequent damages such as e.g. loss of profit, lost savings and other indirect damages shall be excluded unless such damages jeopardize the purpose of the contract.

7.6 The preceding limitations of liability shall also apply for the benefit of digivod gmbh's employees.

8. Severability clause

If individual provisions of the License Agreement are or become void, ineffective or disputable, any other terms will remain unaffected and shall be interpreted or amended in such a way as to ensure that the intended commercial purpose will be achieved as closely as possible in a legally permissible way. This shall also apply to any loopholes in need of amendment. The validity of any other terms hereunder shall remain unaffected.

2. Installation and first steps

This setup program will install your digivod® software with all its necessary components. The following steps will be accomplished during installation:

- Examination of system requirements
- Installation of the digivod® software

Before starting the installation you should check whether all conditions for using the digivod® software are met.

2.1 System requirements

Hardware

Minimum hardware requirements:

- Intel i3 Ivy Bridge or higher
- 4 GB RAM
- Observer Monitor (or beamer/projector) min. resolution 1280 x 1024 pixel (1920 x 1080 recommended)
- 1GB free disk space for digivod® Software
- disc space for video data (depending on the number of cameras, recording duration, resolution, framerate, scenery, compression algorithm, compression settings)
- 1 GBit/s network adapter
- free USB interface for security dongle (server)
- if necessary, CD/DVD burner for video export

Important: In case of using USB cameras, other minimum requirements apply (see Special notes for the use of USB cameras).

Operating system

Windows 7, Windows 8, Windows Server 2003 und 2008, 2012 (32 and 64 Bit)

Network

To run and configure the digivod® software, your computer needs to be connected to the IP-network. The computer must have a valid (possibly private) IP address.

The computer on which you want to install the digivod® services (server) as well as the cameras must be permanently accessible under the same IP address.

When using DHCP a static adress reservation based on MAC addresses must be enabled. Refer to the instructions of you DHCP server (such as DSL router).

If you are not using DHCP IP addresses of server and cameras must be assigned manually.

If a camera cannot be found by the automatic camera search it is recommended to reset this camera to its factory settings and then restart the automatic camera search again. Instructions to reset the camera settings can be found in the camera manual.

2.2 Supported manufacturers

IP cameras and video servers of the following manufacturers are supported:

- 3S
- ACTI
- Arecont Vision
- Axis
- Basler (BIP2-Modelle)
- Brickcom
- Canon
- Cohu
- EverFocus
- Grundig
- IQeye
- JVC
- LG
- Mobotix
- Panasonic
- Pelco (Sarix-Modelle)
- Samsung
- Sanyo
- Sony
- Visicom
- Vivotek

2.3 Firewalls with digivod®

The network communication between digivod® client and digivod® server and cameras uses several ports. These ports must be released on firewalls that are located between these components.

The digivod® recorder receives camera data via UDP-ports 16000-18000.

When using direct camera connection the digivod® observer receives camera data via UDP-ports 14000-15999.

The communication between digivod® observer and digivod® service (see Video.Service) uses TCP-ports 8181 – 8189.

8181 Archive service

8182 Live service

8183 digivod service

8184 Returnchannel

The digivod® web access and the one click installation use TCP port 8180 (see digivod® web access and One click installation). The digivod® web access via HTTPS uses port 8888 (see digivod® web access via HTTPS).

Cameras and digivod® service use UDP port 123 to access NTP-service (see NTP configuration).

Note: During digivod® installation the required port releases are automatically set on a local windows firewall. On other firewalls these releases have to be entered manually.

2.4 Installation of digivod®

To install the digivod® software you must have administrator privileges. If necessary, first log off and then log on again as an administrator.

Note on update installation

In principle an update installation works like a first installation described below. Any existing digivod® settings will be retained during the update. Please refer to the notes given in the chapter Deinstallation.

When using a digivod® system with embedded OS, please refer to the notes in chapter Notes on digivod® with Embedded OS regarding updates.

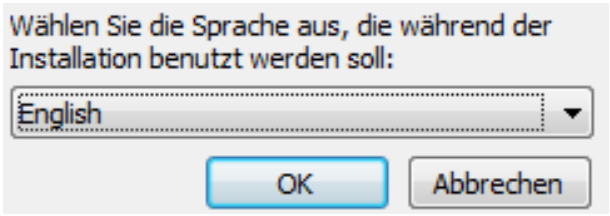
Important: A previous installed digivod® demo version must be deinstalled before installing a licensed full version.

Important: When updating from a digivod® 2.x to a 3.x version, (see Video.Service) the folder \videoservice is moved to c:\ when starting the Video.Service for the first time. In case of the new installation of a digivod® 3.x, \videoservice is directly created on c:\. When starting the digivod® servers for the first time after an update installation of digivod® 2.x to 3.x, the video data is newly structured within the existing storagesets. Depending on the performance of the system, size and fill level of the storagesets, this process can take a longer time.

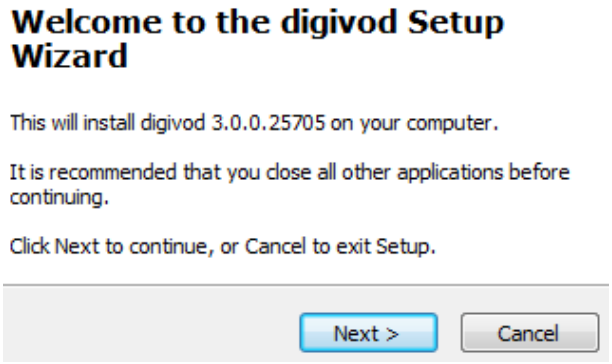
1. To install the program, insert the digivod® USB dongle. The setup wizard should start automatically. If the autostart function is disabled, open the dongle drive using Windows Explorer or My Computer and start the setup program by double-clicking on the file ‘digivodSetup3.x.x.x.exe’

2. You will be prompted to select your setup language. You can choose between German and English.

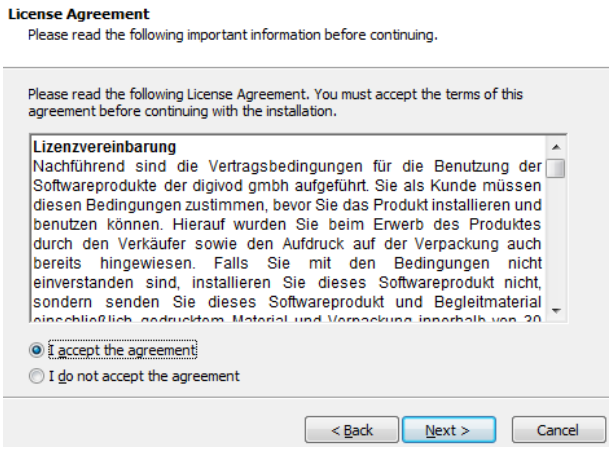
Note: This drop-down list only refers to the language of the installation program. The language of the digivod® observer can be selected by the respective setting in the Windows control panel after the installation.



3. During installation, other programs should not be running. Confirm that you want to continue with Next >.


Welcome to the digivod Setup Wizard
This will install digivod 3.0.0.25705 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

4. The license agreement displayed in the following window can be scrolled using the scrollbar or using the PageUp and PageDown key. Select the option 'I accept the agreement' and click Next >. Accepting the agreement is absolutely required to continue the installation.

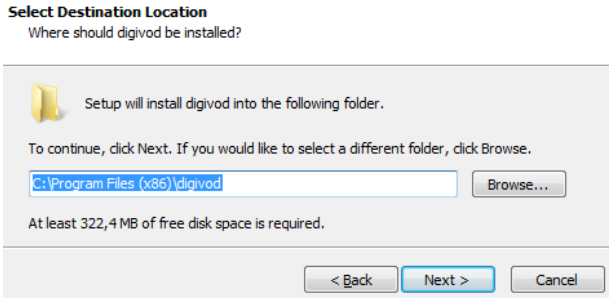

License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.
Lizenzvereinbarung
Nachführend sind die Vertragsbedingungen für die Benutzung der Softwareprodukte der digivod gmbh aufgeführt. Sie als Kunde müssen diesen Bedingungen zustimmen, bevor Sie das Produkt installieren und benutzen können. Hierauf wurden Sie beim Erwerb des Produktes durch den Verkäufer sowie den Aufdruck auf der Verpackung auch bereits hingewiesen. Falls Sie mit den Bedingungen nicht einverstanden sind, installieren Sie dieses Softwareprodukt nicht, sondern senden Sie dieses Softwareprodukt und Begleitmaterial
I accept the agreement
I do not accept the agreement
< Back
Next >
Cancel

5. The next step helps you to determine the installation folder for your digivod® software.

The suggested folder can be changed using the 'Browse' button. The installation folder can also be entered directly into the text field.

Note: In the folder selected here only the program files of digivod® are installed. Video data, exported video streams and snapshots are stored in other folders (see Storagesets, Video export and Snapshots). The digivod® configuration data is stored in the folder \videoservice. (up to digivod® 2.9 this folder is in c:\Windows\ServiceProfiles\NetworkService, from digivod® 3.x in c:\).

After choosing your folder for the program files, click Next >.


Select Destination Location
Where should digivod be installed?
Setup will install digivod into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files (x86)\digivod
Browse...
At least 322,4 MB of free disk space is required.
< Back
Next >
Cancel

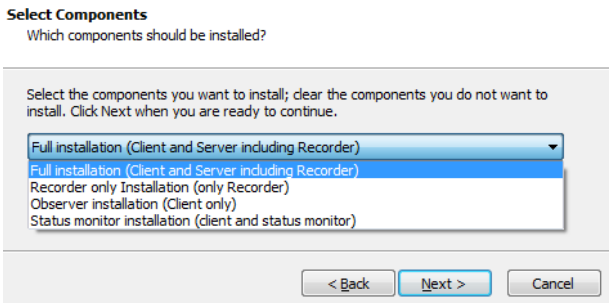
6. This step helps you to determine which components of the digivod® system will be installed on this computer.

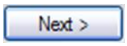
For a single-user installation and for the setup of a server with observer, select ‘Full installation (Client and server including Recorder)’.

To install an observer client in a multi-client configuration, select ‘Observer installation (Client only)’.

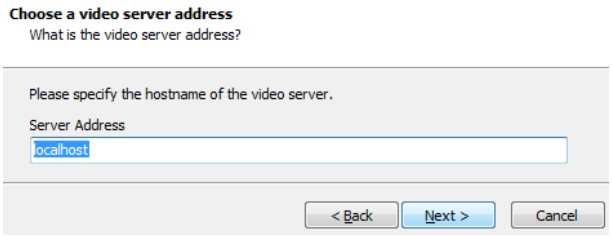
To install an individual recorder of an ENTERPRISE edition, select "Recorder only Installation". After concluding the recorder installation, follow the instructions in chapter Instructions for multi recording installation.

In order to install an observer client in conjunction with the video status monitor, select "Status monitor installation (client and status monitor)". Details for installing and operating the video status monitor can be found in chapter Video status monitor.


Select Components
Which components should be installed?
Select the components you want to install; clear the components you do not want to install. Click Next when you are ready to continue.
Full installation (Client and Server including Recorder)
Full installation (Client and Server including Recorder)
Recorder only Installation (only Recorder)
Observer installation (Client only)
Status monitor installation (client and status monitor)
< Back
Next >
Cancel

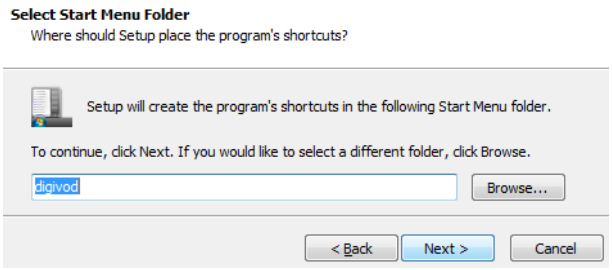
After selecting the components klick  to continue.

7. If you selected to install ‘Observer installation (Client only)’ or ‘Status monitor installation (client and status monitor)’ the next step you will be prompted to enter the address of the digivod® server. If the digivod® server runs on the same machine confirm ‘localhost’ if not enter the IP-adress or the name of the server where your digivod® server has been installed. Click Next > to continue.

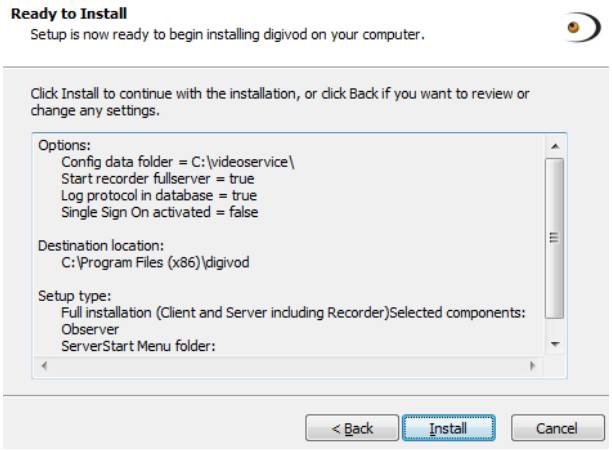


8. The next step is to determine the folder in your start menu where the shortcuts for your digivod® software will be stored. It is recommended to keep the default.

Click Next > to continue the installation.

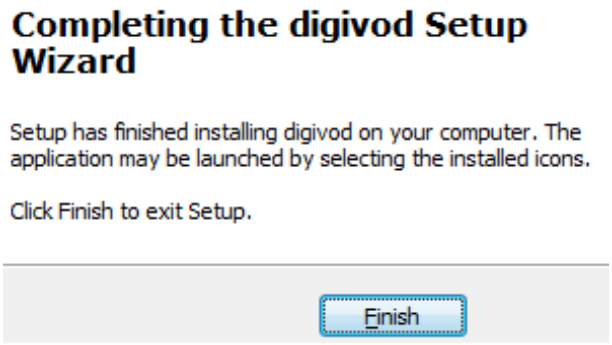

Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
digivod
Browse...
< Back
Next >
Cancel

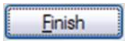
9. The final step will display a confirmation screen that lists the selected folders for your installation. For any changes, select < Back. To start the installation select Install.


Ready to Install
Setup is now ready to begin installing digivod on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Options:
Config data folder = C:\videoservice\
Start recorder fullserver = true
Log protocol in database = true
Single Sign On activated = false
Destination location:
C:\Program Files (x86)\digivod
Setup type:
Full installation (Client and Server including Recorder)Selected components:
Observer
ServerStart Menu folder:
< Back
Install
Cancel

10. At the end of a sucessful installation you will see this dialog box displayed.

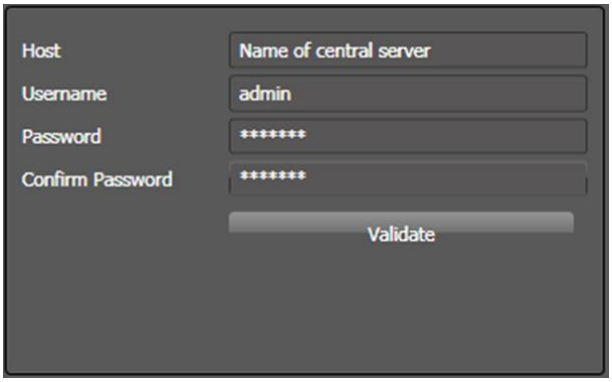
Note: During the installation additional software components (7zip, VLC-Player and if necessary .NET-Framework) will also be installed using their own setup routines. Please confirm the prompts of these setups.


Completing the digivod Setup Wizard
Setup has finished installing digivod on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Finish

Press  to leave the setup program.

2.4.1 Instructions for multi recording installation

After installing a single recorder (see Installation of digivod®) the configuration wizard to configure this recorder will be started automatically.



Enter the name of the digivod® server that shall be enabled to use this recorder in the field behind Host.

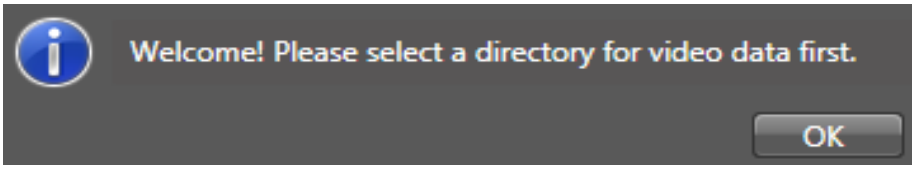
Enter username and password to connect the recorder to this server.

Press Validate to check connection data. After positive validation close the wizard pressing Finish.

The new recorder will now be available to be used in a multi recording installation on the selected digivod® server (see Storagesets).

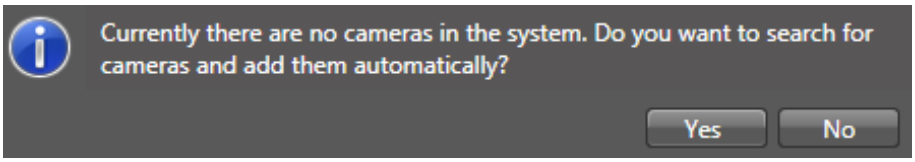
2.4.2 Notes on first start of digivod® Observer

From digivod® 3.x the directory for the video data is no longer selected during the installation. When you start the digivod® observer for the first time after a new installation as described in Starting and exiting digivod® observer and you log on, the following note is displayed:



After pushing OK a dialog box will open for creating and changing storagesets. Follow the instructions in the chapter Storagesets to create the first (default) storageset.

After concluding the creation of the first storageset, the following note will be displayed in case of a new installation:



With Yes you will start the automatic camera search. Follow the instructions in chapter New camera (automatic). If you click on No, you can install the cameras manually later or restart the automatic search out of the camera administration (see New camera (manual)).

2.5 Notes on digivod® with Embedded OS

For the operation and administration of a digivod® system with embedded OS, pre-configured by digivod gmbh (e. g. on a digivod® bundle system), the following notes are to be observed:

System start / logon in digivod®

After switching on a digivod® system with embedded OS, the operating system user "Digivod" will be logged into the embedded OS automatically, the digivod® observer will be started and the digivod® logon dialog box will appear. Then a logon in digivod® with the users administered there is possible (see Starting and exiting digivod® observer).

After ending the observer, the digivod® logon dialog box will open again. The operating system user "Digivod" cannot log off the embedded OS itself.

Operating system users

Two operating system users are preconfigured:

Digivod (default password "Digivod!")

This user cannot change its own password. Its password never expires (it has to be configured by the administrator when changed, if necessary). All Windows functions except "Windows+L" (operating system user change) are not available for this user.

Admin (default password "DigivodAdmin!")

This user has administrator rights in the embedded OS. They can change passwords and have unlimited access to Windows functions.

Important: In order to prevent unauthorised administrator access to the embedded OS, the default password mentioned here ought to be changed after concluding the set-up!

System new start

Only the user Admin can shut down or restart the system by the appropriate operation of the embedded OS.

digivod® updates

Before the digivod® software on a system with embedded OS can be updated, the operating system user "Digivod" has to log off. The update can only be executed by the operating system user "Admin".

For this the following steps are to be carried out:

- Close digivod® observer with

- Use Windows + L for changing the user
- Log on as Admin
- Start of task manager (STRG + ALT + Entf)
- Activate the view "more details"
- In this view, log off the operating system user "Digivod"
- Execution of the digivod® update as Admin (see Installation of digivod®)
- New start of the system

2.6 Starting and exiting digivod® observer

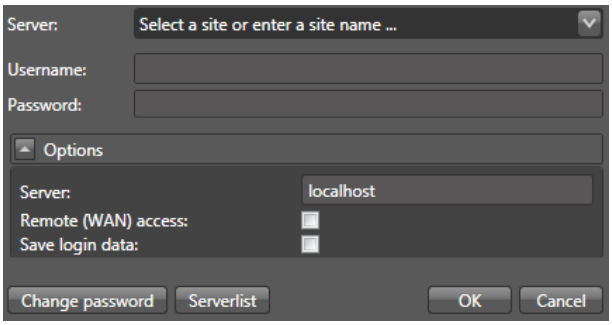
The digivod® observer is the digivod® control center. This program can be started either from the starting menu (start/all programs/digivod2/digivod Observer) or using the desktop icon ‘digivod Observer‘.

Make sure that the digivod® dongle is plugged to a free USB port on the digivod® server.

The program starts with the login screen. Enter ‘user name’ and ‘password’ and press the OK button.

On your first start after installation, please use the following values:

User: admin
Password: digivod



Note: The line Server: is only visible if there are entries in the server list (see below).

Note: Observe the notes in chapter Notes on first start of digivod® Observer when starting for the first time after a new installation. It is highly recommended that you change the password for the admin user on your first login (see Users).

The login dialog options offer the selection of the digivod® server. By default the client connects to the localhost. Instead of localhost other digivod® servers can be connected using their servername or IP-adress.

Note: If you have selected the option "Observer installation (only client)" or the option "Status monitor Installation (client + status monitor)" during the installation (see Installation of digivod®), the server address entered during the installation is stored in the logon dialog box for the server instead of localhost.

Note: Activate the option ‘Remote (WAN) access’ if the server is accessed via the internet. If the observer has been started with this option live views and archive views will automatically be transcoded into bandwith optimized and resolution optimized H.264.

Note: Independent of the start option ‘Remote (WAN) access’ the H.264 live transcoding and the archive transcoding can be switched on and off at any time using the shortcut Ctrl+Shift+W.

Note: If you activate the option ‘Keep login data’ username, password and server will be stored on this client if the login will be successful. Starting the digivod® observer next time will use this data and no input will be required. Press SHIFT during the login to overwrite the stored data.

Use Change password to change the user password. This requires the corresponding permission (see Users).

The button Serverlist will open a dialog box in which various digivod® servers and their access data can be stored. With the buttons Add Delete the server list can be extended and reduced. With the buttons Import Export the list can be exported or an existing list imported. The quick access for the logon on a server stored here is done with at the end of the line Server:.

After entering the logon data or after selecting a server from the list, click on OK to log into the system. With a click on Cancel the digivod® observer will be closed before the logon.

To exit digivod® observer click Close at the bottom of the main menue. The main menue can be opened by single left-clicking on the ‘digivod icon (at the left bottom corner in the window).

Note: By default, digivod® observer will start with a maximized window to offer you the greatest possible work space. You can change the window size in your client settings (see Settings). Use function key F11 to reduce the window size. In a non-maximized window, digivod® observer can be terminated via the icon.

3. Program overview

After starting the digivod® observer, the main window will be opened (in this image, the window is empty yet, as it will be the case after installation):

The clock to the top left always displays the current time. Underneath the observer shows a summary of framerate and bitrate of all currently displayed video data.

Underneath the digivod® navigation tree are symbols for installed cameras and defined views and routes. You can create the elements shown in your navigation tree as explained in chapter 'Administration' (see Administration). Double-click on these symbols to open the corresponding views in your Display area.

Underneath the navigation tree, the list of incoming alerts will always display your most recent incoming alerts (see List of incoming alerts).

A single left-click on the **digivod® icon** below the list of incoming alerts will open the digivod® main menu (see digivod® main menu).

Optionally i.e., in case siteplans have been previously defined, they will be shown between the list of incoming alerts list and the digivod icon.

The large empty area on the right side is the Display area (see Display area).

3.1 Navigation tree

After having created cameras, views and camera routes in the digivod® administration, these will be shown in your navigation tree underneath the clock in digivod® observer (see digivod® overview).

The following symbols are used:

for PTZ cameras (red if offline)

for other cameras (red if offline)

for views (also IO view) (see Show view and IO view)

Note: The layout represents the layout of the underlying view.

for Camera tours

for siteplans

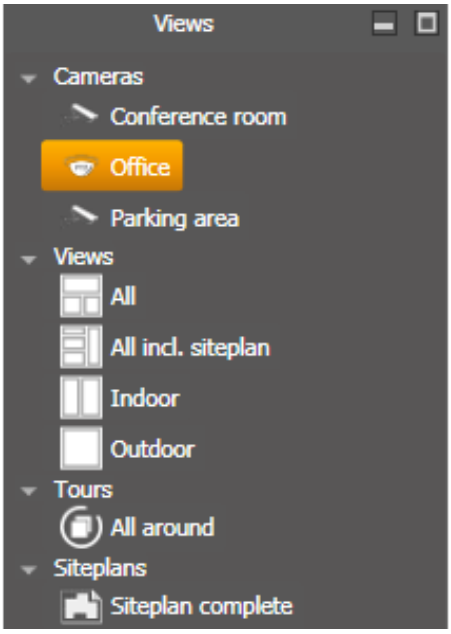
a double left-click will open a group of elements

a double left-click will close a group of elements

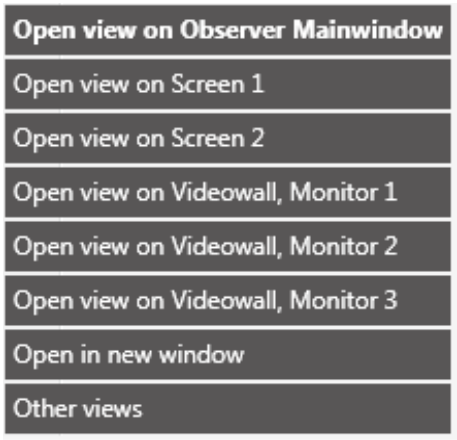
a left-click will open the system state display (see System state display)

The grouping of the displayed objects will be optional, being visible only if group names have been given to single elements like cameras, views, Camera tours or external sources (see Administration or External sources (Multi-Location edition only)). By default the groups ‘Cameras’, ‘Views’, ‘Tours’ and ‘Siteplans’ are predefined.

Regardless of any grouping within the navigation tree, all objects will be located under the main group ‘Views’.



Using the context menu by clicking the right mouse button offers a choice on what monitor a new object shall be opened.


Open view on Observer Mainwindow
Open view on Screen 1
Open view on Screen 2
Open view on Videowall, Monitor 1
Open view on Videowall, Monitor 2
Open view on Videowall, Monitor 3
Open in new window
Other views

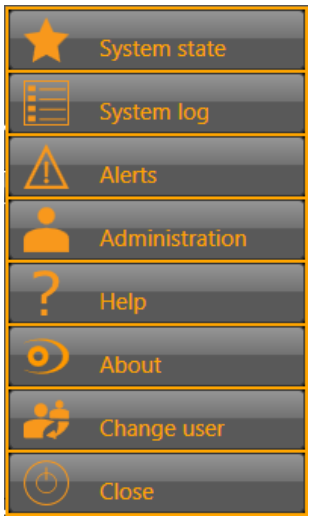
Working in multi-monitor mode or using the videowall option (see) all available monitors will be offered here. Cameras, views and tours can be opened in full screen mode on the selected monitor immediately. Using „Another view“ allows also to open any other view that contains this camera.

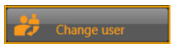
3.2 digivod® main menu

A single left-click on the **digivod® icon** below the list of incoming alerts list will open the digivod® main menu.

The quick access menu beside the digivod® icon offers direct one click access to the dialog functions that have been used previously.

This menu gives access to all digivod® settings functions. Details can be found further below in this manual.



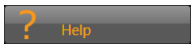
Note: 

will only occur, if there is more than one user in the system. Immediately after installation there is only the user ‘admin’ and change user is not available (see Users).

3.3 digivod® help

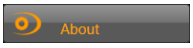
The digivod® observer offers you the following support:

Infobox / Quickinfo: Will be displayed when the mouse pointer remains on an input field or a button. The text shown in the infobox (usually below the input fields) will give you a short explanation on possible inputs on your part. An automatically displayed infotext gives your further details on this button's function.

Manual: 

opens this manual.

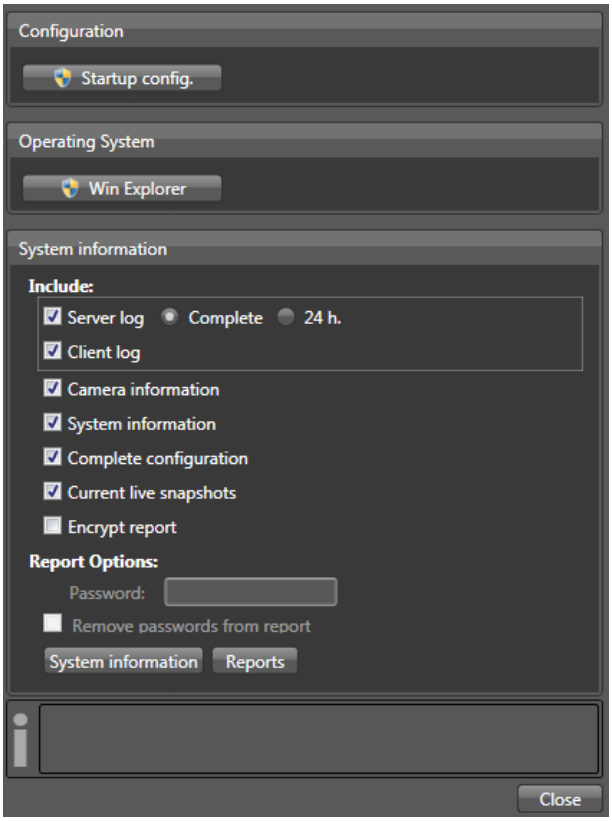
3.4 digivod® system information

Press 

to access this window that shows important details about your digivod® installation.

On top the dialog shows the version of your digivod® client and the serial number of the digivod® license in use.

Press OK to close this windows, press Maintenance to open the extended maintenance functions.



Important: The extended maintenance functions Teamviewer and System information should only be used in consultation with the digivod® support team.

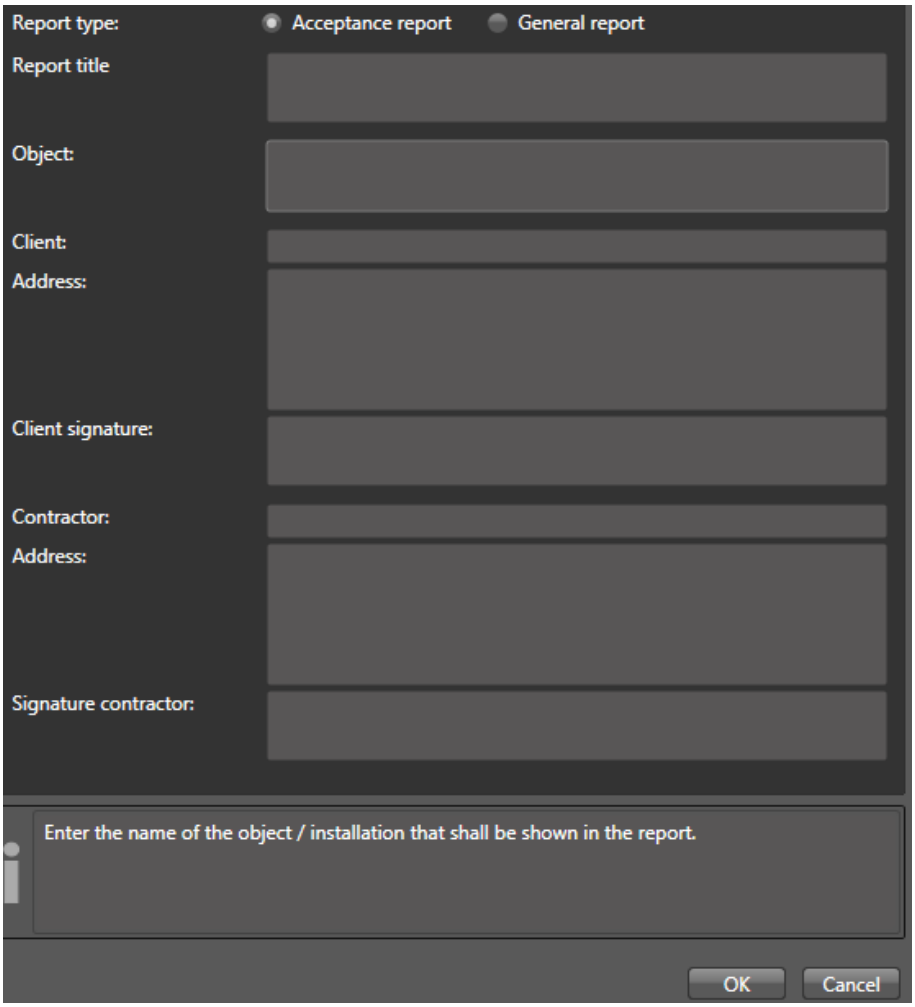
Press Startup config. to start the ConfigureStartup program, then follow the instructions in chapter Observer as single application.

Press Win Explorer to open the Windows Explorer as administrator. If the current windows user does not have administrator privileges the administrator password will be required.

Press Close to leave the extended maintenance dialog.

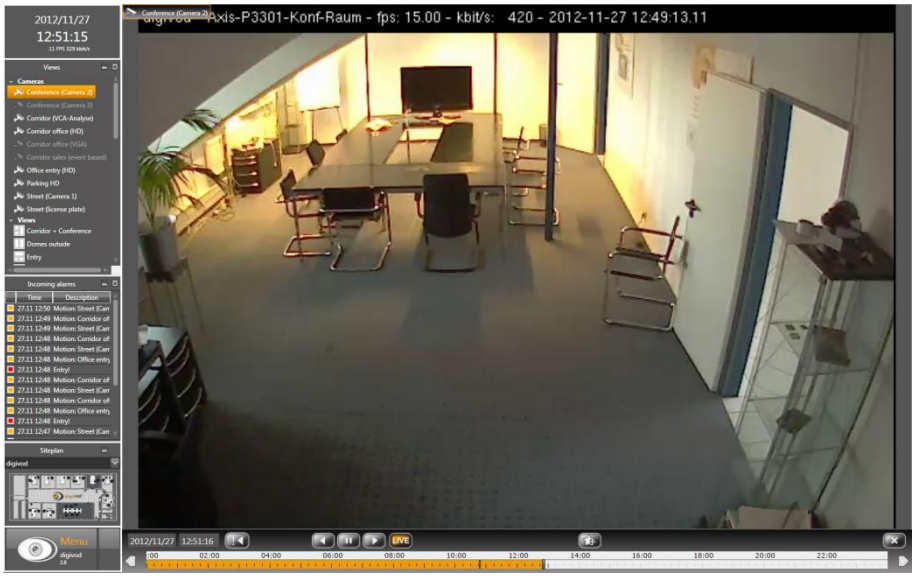
With Reports you will open the dialog box for the report generation. Under report type you choose between Acceptance report and General report.

The layout of both reports is identical. In the Acceptance report all fields you can see in the dialog box below can be filled. This report is suitable e. g. as a basis for an acceptance documentation after concluded set-up. In the General report only the headline and object name can be entered. This report is suitable e. g. for a general documentation of the system status.

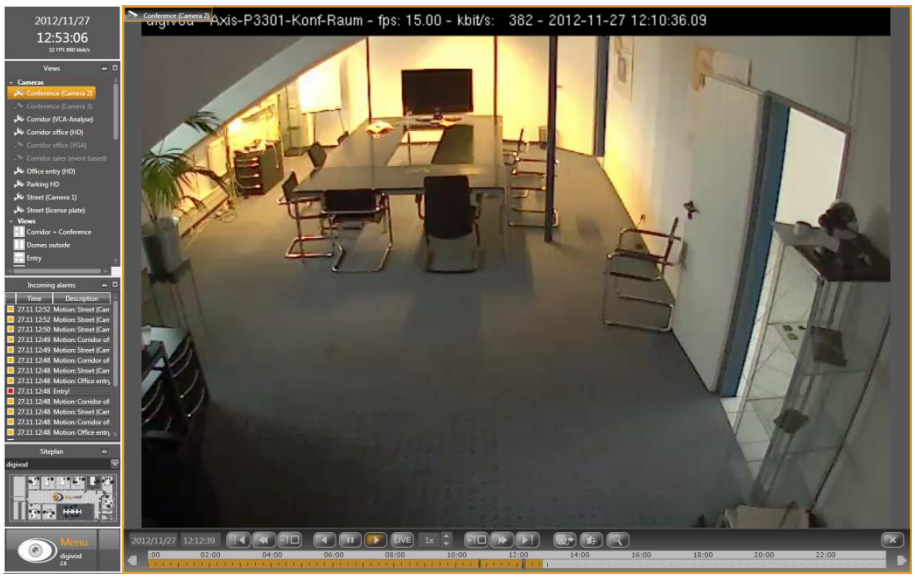


3.4.1 Display area

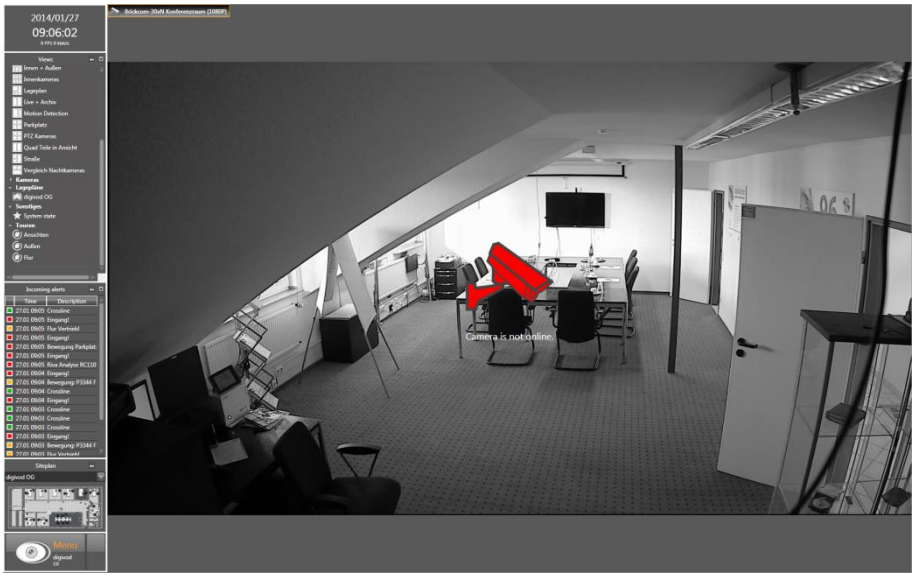
This Display area shows video data (live views and archives views) of open cameras or views, as well as the control panel of your digivod® player. By selecting a camera, a view (also called: multiple view), or a tour using a left double-click, the corresponding video data will be shown in your Display area:



Note: While playing the video data from the archive the cameras shown in the display area will be framed in orange!



Important: If the opened camera is currently offline, the digivod® observer will show the last reference image of this camera in black/white in the display area with a corresponding error message in the centre. (see Reference snapshots).



Important: Opening a camera that currently doesn't provide live video data (e. g. because camera has been deactivated or camera is offline) will cause the digivod® observer to show the oldest archived video data of this camera. Accordingly this view will be framed orange.

3.5 PTZ position menu

In the upper left corner of each camera view you will find the name of the camera exactly as it has been defined in administration (see Cameras). PTZ cameras are marked with the symbol . All other cameras are marked with the symbol .

In a live view (!), the PTZ position menu will be shown automatically when the mouse pointer is moved across the camera name (only for PTZ cameras if PTZ functionality has been activated).

Note: The buttons - Default + for iris control and focus control are only visible, if these functions have been activated in the advanced configuration within the camera settings (see Cameras).

Use the - and + beside Iris and Focus for manual control of iris and focus. A single left-click on Default resets iris and focus to default values.

Note: The buttons Cont. PTZ tour and Pause PTZ-Tour are only visible, if there is an active PTZ-Tour for this camera (see PTZ configuration).

A single left-click on one of the predefined PTZ positions allows for fast PTZ positioning. Use Pause PTZ-Tour to stop a running tour. Use Cont. PTZ tour to continue.

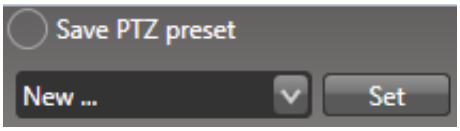
Note: Predefined PTZ positions are only visible, if the user has the corresponding privileges (see Privileges (user groups)).

More details on PTZ control can be found in chapter PTZ control.

Instead of PTZ control with the mouse each PTZ camera can also be operated via the joystick simulation. A left mouse click on the appropriate direction arrow will move the trigger the corresponding move.

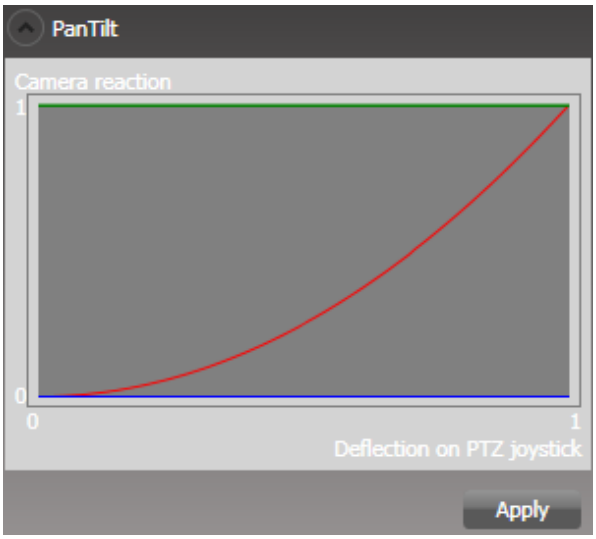
Use the vertical slider between + and - to trigger the camera zoom function.

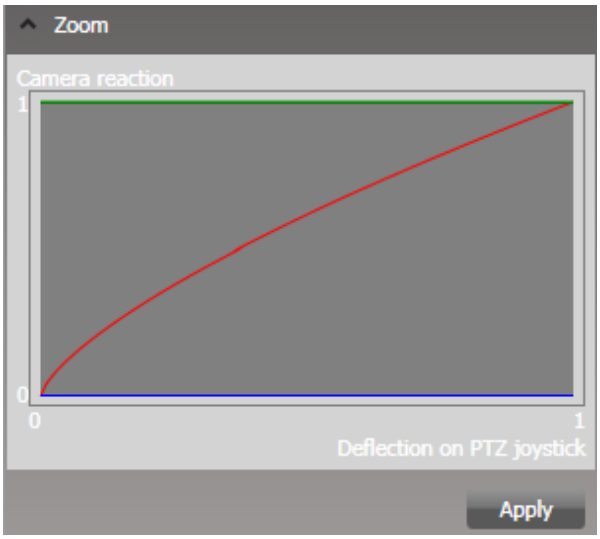
Press Options to open the extended PTZ position menu. With Save PTZ preset you can save the current PTZ position as well as overwrite existing PTZ positions.



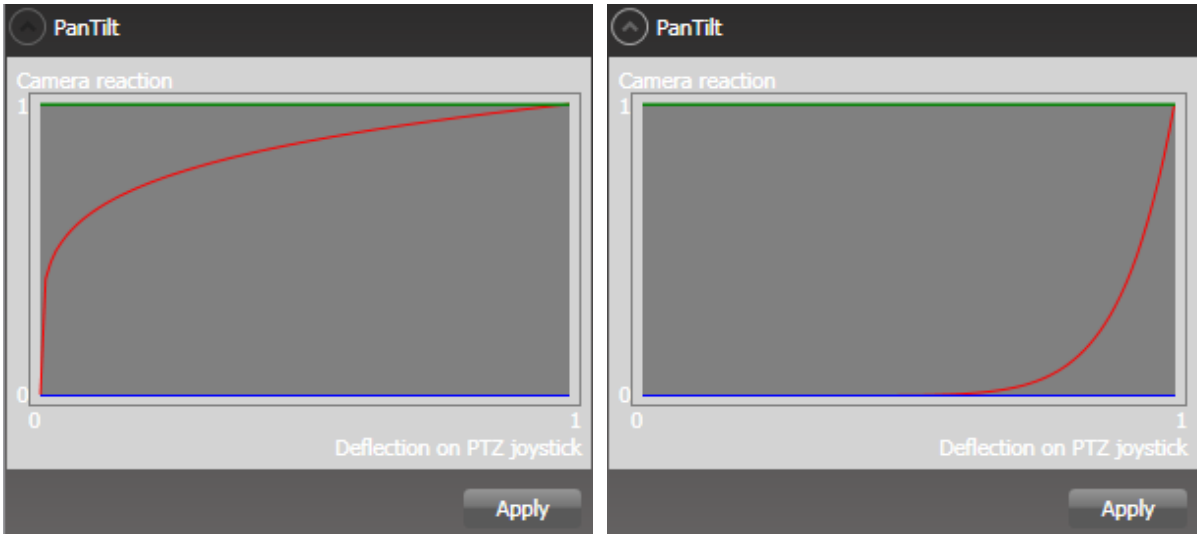
Use Set to overwrite the selecte PTZ preset with the current camera position.

A single left-click on beside Pan/Tilt or Zoom opens or closes the parameter curves for pan/tilt-settings and zoom-settings. This setting is only valid for PTZ-control via joystick!





If the mouse cursor is above one of the curves the curve will be automatically marked. Hold left mouse button down to modify the curve. Finish the modification pressing Apply.



The setting shown on the left causes small joystick deflections to trigger great pant/tilt-deflections. This can be used for fast pan/tilt-moves over a great area. The setting shown on the right requires greater joystick deflections. This setting allows a good fine adjustment of pan/tilt-positions. The same applies, mutatis mutandis, to the setting of the zoom behavior.

Note: PTZ settings made in the PTZ position menu are saved for this user and this client (see Advanced PTZ properties).

3.6 Camera function symbols

In a live view (!), the camera function symbols will be automatically shown in the right upper corner when the mouse pointer is moved across the header area of a single camera window.

The symbol is available in multiple views. With a single left-click it switches from multiple view to single view for this camera.

A single view that has been opened from a multiple view will display this symbol: . By a single left-click you can switch back to your previous multiple view.

Note: Alternatively a double left click into the a single camera image can be used to open a single view and switch back into the multiple view.

3.6.1 Manual recording

Press respectively to start and stop the recording of a single camera.

Note: The manual recording control is only visible, if the schedule ‚No recording' has been assigned to this camera (see Schedules for recording parameters).

3.6.2 Optical / digital PTZ

By a single left-click on the symbol (only available for PTZ cameras if PTZ functionality has been activated) you can switch between optical and digital PTZ.

Details can be found in chapter Digital zoom / digital PTZ.

3.6.3 Fastback

A single left-click on the symbol opens the fastback function. With a second single left-click on one of the displayed fastback jumptimes (live, -5s, -10s, -20s, -30s, -60s), your displayed video will 'jump back into the past' by the number of seconds that have been selected.

Fastback will be terminated automatically once the time you 'jumped back' has run out, and your display will return back to live view.

During active fastback view, your 'jump back time' will be shown at the right edge of your view.

Note: Using fastback in a multiple view will result in asynchronous viewing. Cameras will show video data from different time zones within one multiple view.

3.6.4 Snapshots

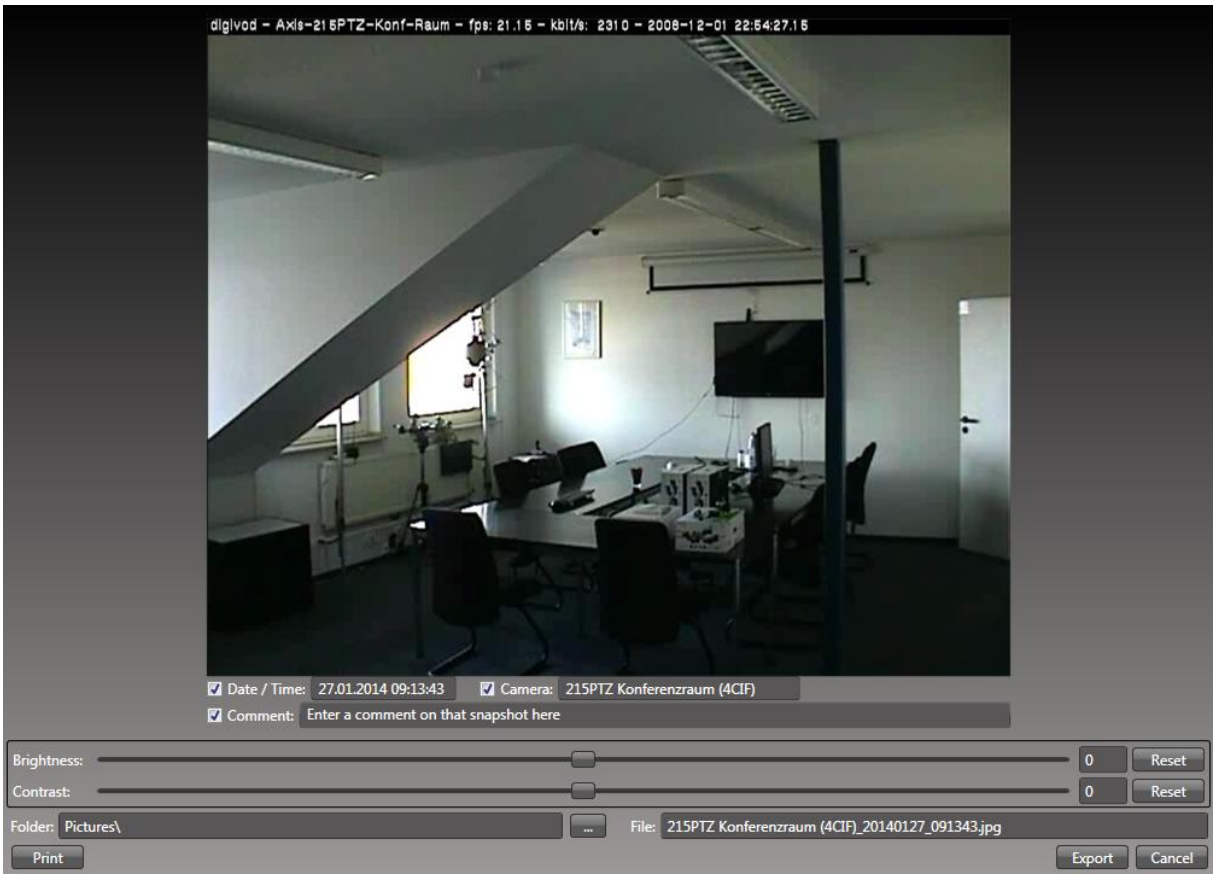
Use the symbol (also available during archive viewing) to pick a snapshot from a single camera.

After a single left-click on this icon, the snapshot will be shown in a control window. Press Export to save the snapshot to your predefined folder. It will be saved as a .jpg file using your predefined filename.

Before saving the snapshot its brightness and contrast can be modified using the sliders. Instead of using the sliders numbers between -255 and 255 can be written in the corresponding datafields. Use the Reset Button to revert your changes.

Your predefined folder can be changed by single left-clicking on the button.

The file name will be predefined using the camera name and current date/time.



Note: Snapshots can optionally be marked with a watermark graphic (see General settings). A digivod® watermark file can be found in the program directory in \DefaultWatermark.

4. Using digivod® observer

The digivod® observer offers you several options for displaying video data and doing research in your video archive. It can also present video data from single cameras, multiple views, tours and siteplans.

Note: The hotkey Strg+O will open a drop-down list for the quick selection of an object from the navigation tree.

In single views and multiple views, the control panel of the digivod player will be available at the bottom of your view (see digivod® player). This control panel can be used to switch between live and archive viewing mode. Camera tours will be available in live mode only.

Note: To access archive viewing, a user needs to have the required rights (see Users and Privileges (user groups)).

Note: This chapter describes how to operate a fully equipped and configured digivod® system. It assumes, however, that the following steps have already been implemented:

- Installation (see Installation of digivod®)
- Administration of cameras (see Cameras)
- Possibly administration of users and privileges groups (see Users and Privileges (user groups))
- Possibly configuration of views and siteplans, if required (see Views and Siteplans)
- Possibly configuration of Motion detection, if required (see Video sensor (Motion detection))
- Possibly configuration of modules, if required (see Modules (optional))

4.1 Show camera

A double left-click on a camera icon in the navigation tree opens up video data in your Display area (see digivod® overview and Navigation tree).

If a user has all the privileges required to access a live view (see Users and Privileges (user groups)), his camera will open in its live view. If the user does not, however, have live view access, the camera will open the most recent video data from the archive.

Moving the mouse pointer across the header area of a single camera window will open the PTZ position menu (only available for PTZ cameras) and the camera function symbols (see PTZ position menu and Camera function symbols). The corresponding functions can be activated by a single left-click.

Moving the mouse pointer across the bottom of the camera window will bring the control panel of your digivod player to the foreground and make it accessible (see digivod® player).

Note: A single right-click on a camera symbol (or a view symbol, or a camera tour symbol) allows you to open this object in addition to the ones already open. It also offers you a selection of your target monitor.

4.2 Show view

A view (also called ‘multiple view’) is a free combination of single cameras that can be predefined within your digivod administration (see Views). One single camera can be contained in a view more than once.

By a double left-click on a view icon in the navigation tree you can open this view, including all its cameras, in your Display area (see Program overview and Navigation tree).

If a user has all the privileges required to access a live view (see Users) the view will open in its live view. If the user does not have live view access, the view will open the most recent video data from the archive.

Moving the mouse pointer across the header area of a single camera window opens up the PTZ position menu (only available for PTZ cameras) and the camera function symbols (see PTZ position menu and Camera Function Symbols). The corresponding functions can be activated by a single left-click.

Moving the mouse pointer across the bottom of the view will bring the control panel of the digivod player to the foreground and make it accessible (see digivod® player). Operating the digivod® player will always affect all the other cameras contained in a view.

Note: The content of a single camera within a view can temporarily be modified by dragging and dropping another camera from the navigation tree (see Navigation tree). If a so modified view is closed and reopened again it will appear like it has been defined in the view administration.

4.3 Switch view / camera

A double left-click on a single camera window enlarges this camera to full screen. A second double left-click will restore the previous view.

Alternatively, the same actions can be performed using the symbol (brings a single camera to full screen) and the symbol (back to previous view).

A right mouse click on the or the symbol opens a list that shows all view that contain this camera. These can be opened from that list using a left click.

Note: When moving your cursor across the image area of a PTZ camera window, the cursor will automatically change into a PTZ crosshair (see PTZ control). In such a cursor position, a double left-click will switch from current view to full screen (and vice versa) as well as activate the corresponding PTZ positioning. Therefore, in case no crosshair is displayed please either use the abovementioned symbols, or double left-click in the header area of the PTZ camera.

4.4 Show camera tours

A combination of existing cameras and views can be used to build a so-called camera tour (see Camera tours). One single camera (view) can be contained within one camera tour more than once.

Specifically, a camera tour is a predefined sequence of full images displaying individual cameras and views in a predefined order and speed within an endless loop.

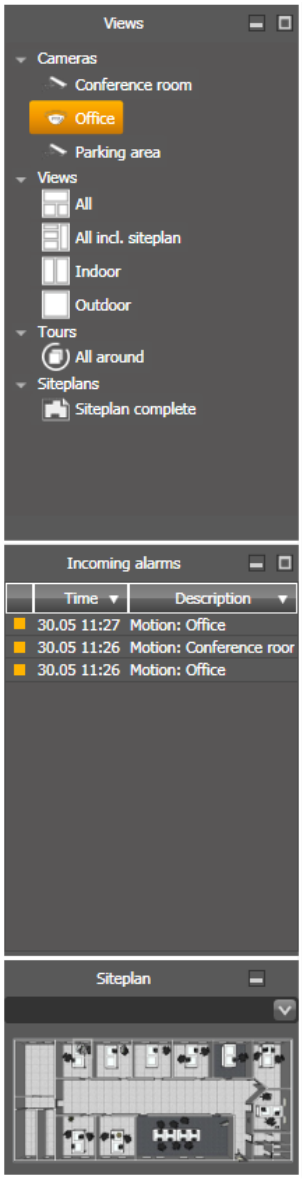
A double left-click on a camera tour icon in the navigation tree will open and start the camera tour in your Display area (see Program overview and Navigation tree). Camera tours will only work in live mode.

The snapshot symbol for each single camera can be activated by moving the mouse pointer across the header area of the camera (see Snapshots).

Note: By a simple right-click on a camera tour symbol (or a camera symbol, or a view symbol) you can open this object in addition to the one already open; if required, this also lets you select your target monitor.

4.5 Using siteplans

Siteplans offer you the possibility to access single cameras, views and other siteplans without using the navigation tree (see Navigation tree). A siteplan usually consists of a floor plan of a building or of an area that contains the cameras installed in in this building / area.



Siteplans in digivod® observer – if they exist – will be displayed below the list of incoming alerts and above the digivod® icon (see Siteplans). Each siteplan can be selected at the top of the siteplan display using the symbol .

You can enlarge or shrink a siteplan using the mouse wheel. Use the right mouse button to open the context menu for opening the siteplan.

By selecting an object (camera, view or another siteplan) contained in a siteplan with a double left mouse-click, the object will be opened as if it was opened from the navigation tree (see Navigation tree). A double left mouse-click on an IO port will trigger the action that has been defined in the IO port administration (see IO ports).

Cameras triggering an alert will be marked with their previously defined alert priority color (see Rules). The status of IO ports will be shown using the icons that have been defined in the IO port administration (see IO ports).

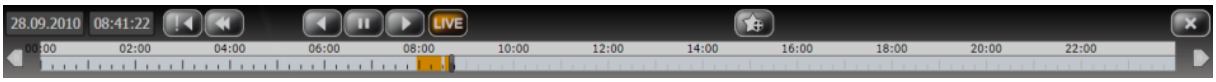
4.6 digivod® player

The digivod® player controls your display of video data for individual cameras and views. Moving your mouse cursor across the player area activates the control panel. These functions can be activated with a single left-click.

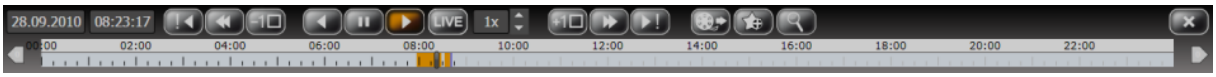
There is a live mode and three different archive modes available:

Live mode	shows live views from open camera(s)
Play forward	shows archive videos from your open camera(s) in a forward direction and in your selected speed
Play backward	shows archive videos from your open camera(s) in a backward direction and in your selected speed
Pause mode	shows a still image of your open camera(s) at the time when this mode was activated

The live mode offers you the following functions:



The archive modes offer you an extended set of functions. The player menu may also be extended:

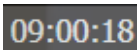


The button you used last will ‘snap in’ and be marked orange when pressed (only for ‘play backward’, ‘pause’, ‘play forward’ and ‘live’ mode)

Note: Operating the digivod® player will always affect all the other open cameras. An active fastback display (see Fastback) may be terminated using the player buttons.

Date of the currently displayed video

A left click into this field will open a calendar. Days for which archived video data is available will be marked orange. A leftclick on such a day will open video archive at the currently displayed time if possible. If there is no video data around that time. the archive will be opened showing the oldest video data of that day.



Time of the currently displayed video

This field can be overwritten by direct keyboard input. Please observe the indicated format!

When leaving the field using TAB or Enter, the open camera/view will ‘jump’ to your defined time.

When jumping from live view or from one of the archive modes, the player will remain in its last active mode.These symbols shows that there is no or no more archive data to be displayed (see digivod® recorder and digivod® cleaner).

Return to the previous alert

The current display jumps back to the recent alert before displayed time, while the player remains in its last active mode.

Return by a (short) time

Clicking this button will make your player return by a short predefined time interval.

Select the size of this time interval with a single right-click on this button (5, 10, 20, 30 or 60 seconds).

The selected time will be stored until overwritten by another time.

With each single left-click, the current display will jump back by your selected number of seconds, while the player will remain in its last active mode.

Return by one frame

Your current display will change into pause mode and jump back by exactly one frame.

Play backward

Your current display will run backward in your selected speed.

Pause

Your current display will switch to pause mode.

Play forward

Your current display will run forward in your selected speed.

Live

Your current display will jump to live mode.

Speed selection

By single left-clicking on the buttons, play speed can be varied from 1/8 to 16. A single view can also run in 32 speed mode. You can make your selection while being in any mode.

Depending on your computer's performance and your number of cameras, from a pre-defined speed only keyframes (I-Frames) will be shown. This mode will be indicated by the symbol in the control center of your player.

Jump forward by one frame

Your current display will change into pause mode and jump forward by exactly one frame.

Forward by a (short) time

Clicking this button will make your player jump forward for a short predefined time interval.

Select the size of this time interval with a single right-click on this button (5, 10, 20, 30 or 60 seconds).

The selected time will be stored until overwritten by another time.

With each single left-click, your current display will jump forward by your selected number of seconds, while the Player will remain in its last active mode.

Jump forward to the next alert

The current display jumps forward to the next alert after displayed time, while the player remains in its last active mode.

Set Bookmarks

This button opens a functional menu for manual setting of bookmarks in the archive. (see Bookmarks)

SmartSearch

This button opens a functional menu for our ‘SmartSearch‘ feature. ‘SmartSearch‘ lets you subsequently apply server-side Motion detection on video data which have already been archived. (see SmartSearch)

Video export

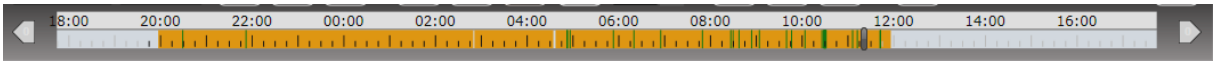
This button opens the video export menu (see Video Export)

Close window

This button will close your current display.

4.7 Timeline

The timeline is located below the control panel of the digivod® player.



The basic colour of the timeline is grey. The orange colour indicates the time ranges for which video data is available in your archive.

Time ranges for which video data for all cameras is available will be marked with a darker orange. Time ranges for which video data is available for at least one camera will be marked with a lighter orange.

For operating purposes, the timeline has been divided into two parts. When the mouse pointer is in the upper part of the timeline (i. e. the part containing times and dates), you can drag the time period displayed within the timeline to the left or right, as you wish, while keeping your left mouse button pressed down. Alternatively, you may move the time period to the left or right by left-clicking the symbols or at the end of the timeline.

In the bottom part of the timeline, the grey slider defines the time of current display; you can grasp it with your left mouse button and move it freely within the time window. This procedure (called ‘fast scan‘) is the fastest way of evaluating archived video data. Alternatively, you may also left-click the pointer and then position it anywere within the timeline.

Next to the time grid lines you will find vertical lines in the bottom part of the timeline – these will identify incoming alerts. Their colour corresponds to the particular alert priority defined in your alert administration (see Rules). Medium priority alarms will be displayed as black to become visible on the orange timeline. When mouse is over a timeline alarm marker a preview thumbnail of the alarm-triggering event will automatically be displayed.

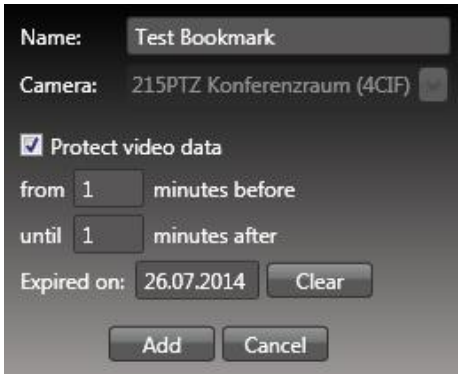
In multiple views, all alerts of your indicated cameras will be displayed together. In views for single cameras, only alerts of this camera will be shown.

Whether your mouse pointer will be in the top or bottom part of the timeline, you may always change the timeline scale in four different levels using the mouse wheel.

Note: For an accurate selection of the video data triggering an alert, using the timeline will generally be insufficient. Instead, you can roughly position the slider using the left mouse button as described above, and then select the buttons ‘Return to last alert’ or ‘Jump forward to next alert’ (see digivod® player) for fine tuning.

4.8 Bookmarks

Open the functional menu ‘Bookmarks‘ from your digivod player by clicking the button .



The point of the slider’s current position on the timeline will be indicated by a manually set bookmark (see digivod® Timeline).

This bookmark will be identified as an alert in the archives (under its given name in this functional menu) and displayed in the list of incoming alerts (see List of incoming alerts) as well as in the alert list itself (see Alertlist). Bookmarks will be represented in neutral priority blue color. If the bookmark menu has been opened from within a particular view, you can open the list of available cameras for this view in the ‘Views‘line by hitting the button to select an individual camera. In each case, a bookmark will always refer to one single camera only.

As an option you may activate ‘Protect video data’ to protect those video data which are located before and behind the bookmark from being overwritten (see SaveLock).

Note: The proposed date for the release of the deletion of the bookmark is 180 days in the future. With

this value can be deleted. A bookmark without expiry date and the video data area protected by this bookmark will never be deleted automatically. However, a large number of bookmarks or large time periods which are to be protected by bookmarks from being overwritten may cause you to run out of sufficient memory for recording video data. Therefore, we recommend manually deleting SaveLock areas set through bookmarks in regular intervals. You may opt to either delete the SaveLock only (see Delete SaveLock), or you may delete the bookmark from the alert list together with its corresponding SaveLock (see Alertlist).

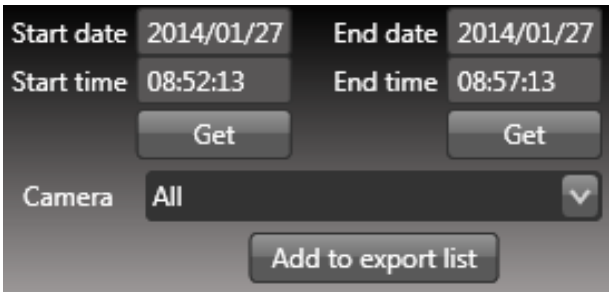
Note: By default digivod® stores video data in one minute blocks. According to length and location of a protected bookmark, in most cases the resulting protection area will be longer than selected here.

4.9 Video export

Archived video data can be exported directly from an open camera / view (see digivod® player).

Note: For exporting individual pictures see chapter Snapshots.

The button will open the export function menu and export dialog box in the three archive modes (see Export type):



Note: The line with the selection of a camera will only be shown if the export function menu is opened from a view.

Start date and time as well as end date and time of a single export interval can be entered directly in the given format using the keyboard.

Alternatively, the definition can be made by taking over the current position data of the slider on the timeline (see Timeline). In order to do this, position the slider on the start or end time and take these over by a single left click on the button below the corresponding data fields.

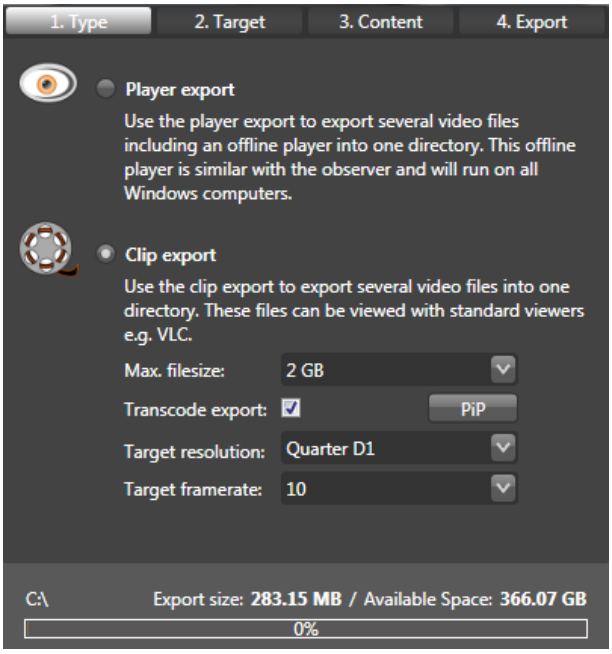
If the export function is opened from of a view, the drop-down box with the cameras included in the view can be opened with the button . The following actions refer either to the selected camera or in case of selecting "all" to all cameras included in the view.

By clicking on Add to export list, you add the export interval currently defined both by start date and time and end date and time to the export list. The export list can have unrelated items and cover more than one camera without any restrictions.

The current content of the export list can be displayed as described in chapter Export content.

4.9.1 Export type

After finishing the export list, you choose the export type in the first tab of the export dialog box.


1. Type
2. Target
3. Content
4. Export
Player export
Use the player export to export several video files including an offline player into one directory. This offline player is similar with the observer and will run on all Windows computers.
Clip export
Use the clip export to export several video files into one directory. These files can be viewed with standard viewers e.g. VLC.
Max. filesize:
2 GB
Transcode export:
PiP
Target resolution:
Quarter D1
Target framerate:
10
C:\
Export size: 283.15 MB / Available Space: 366.07 GB
0%

Player export

Use the player export to export the video data together with a digivod® offline player into its own folder (export package).

The digivod® offline player is identical to the digivod® observer with regard to its handling and runs on any Windows computer without installation. It is started by double clicking on the script file "StartViewer".

Note: In case of the player export, the video data is always exported unchanged in the digivod® format.

Clip export

Use the clip export to export single video files into their own folder.

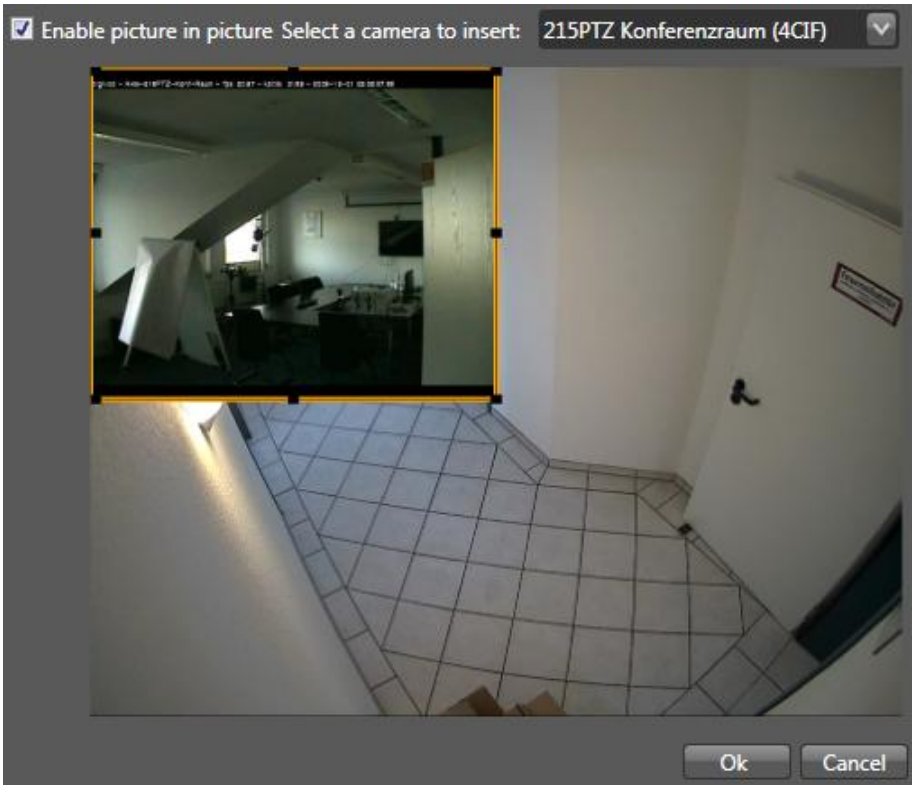
Note: The exported video data can be played using e. g. Windows Media Player or the free VLC Media Player. By default, the VLC Media Player is installed with the digivod® installation (see Installation of digivod®). The Windows Media Player requires the installation of the appropriate MPEG4 Codecs, depending on the version.

Note: Video data recorded with the compression procedure MxPEG (Mobotix) cannot be exported using the single export, as they cannot be played using the VLC Media Player. The player export is also possible with MxPEG without any restrictions.

With Max. filesize: you will define how big a single video file in this folder may be as a maximum.

Optionally, this video data can be transcoded into another target format when exporting. Choose the desired target format parameters under Target resolution: and Target framerate:.

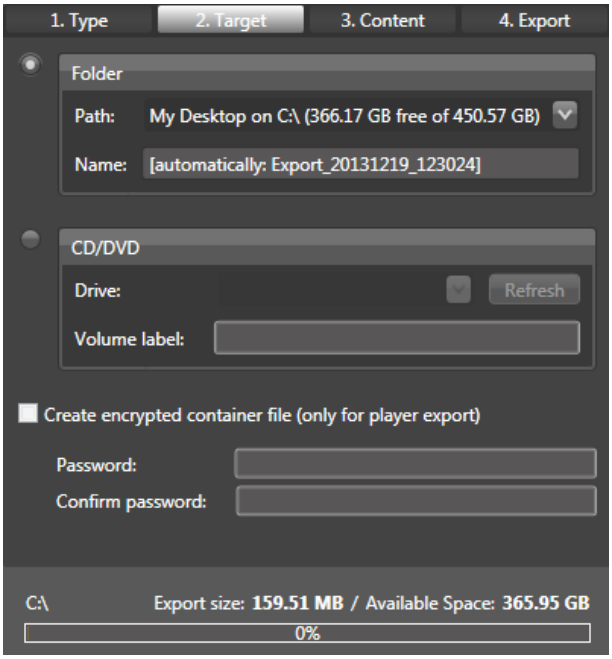
With activated transcoding it is possible to use PiP (Picture in Picture) so that the video image of a second camera can be inserted in the exported video material.



In order to do that, first choose which camera image you would like to insert in the exported video data. After double clicking on the inserted camera image, you can change this regarding size and position.

4.9.2 Export target

In the second tab of the export dialog box, you will choose the target and the folder name for the export.



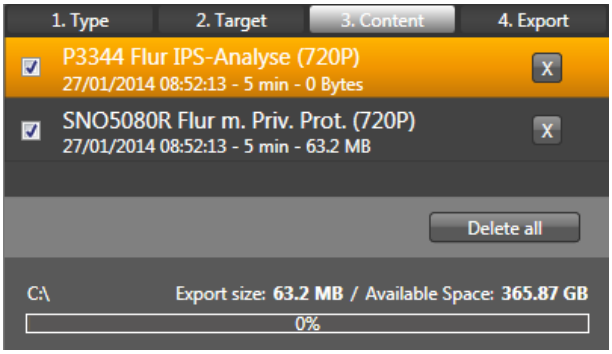
By default, the personal video folder of the user is suggested as target. With you can choose other targets.

For the player export, the content of the generated export package can optionally be encrypted.

4.9.3 Export content

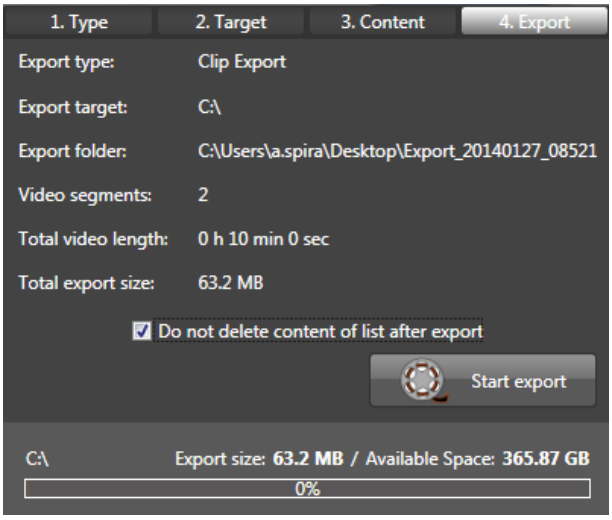
In the third tab of the export dialog box, you will see the current content of the export list. Camera name, start time and length of the export data as well as file size are shown.

With ☑ or ☒ you can exclude an item of this list from the export or delete it completely from the list. With Delete all the complete list will be deleted.



4.9.4 Starting the export

In the fourth tab, the export will be started with the button Start export. Above this button, this tab shows a summary of the selected settings.



By default, an export list will be deleted after the export. Activate the checkbox ☑ Do not delete content of list after export if you need the current list or parts of it for further exports afterwards.

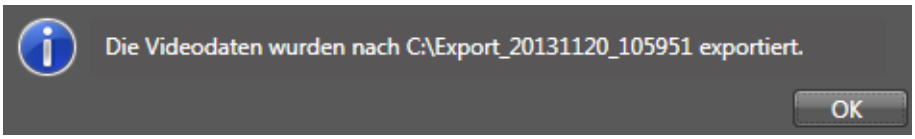
Note: Depending on the size of the video data to be exported, this process can take a very long time.

The export can be aborted any time using the button Cancel. After concluding or cancelling the export, the dialog box will be closed by Close.

The digivod® observer can still be used during the export. The export dialog box can be minimised and positioned in the background by the button in the right hand corner of the Windows window.

After a clip export, the single exported video files can be opened directly with the button Open if a suitable player is installed.

The following message confirms the successful conclusion of the export process.



4.10 SmartSearch

In archive mode press from the player to open the 'SmartSearch' and 'QuickSearch' (see QuickSearch) function menu.

SmartSearch scans archived video data for movements.

When you open the SmartSearch functional menu, the slider's current position on the timeline (see digivod® Timeline) will be imported as the applicable start date and time for SmartSearch, with a corresponding end date and time defined as five minutes after this point.

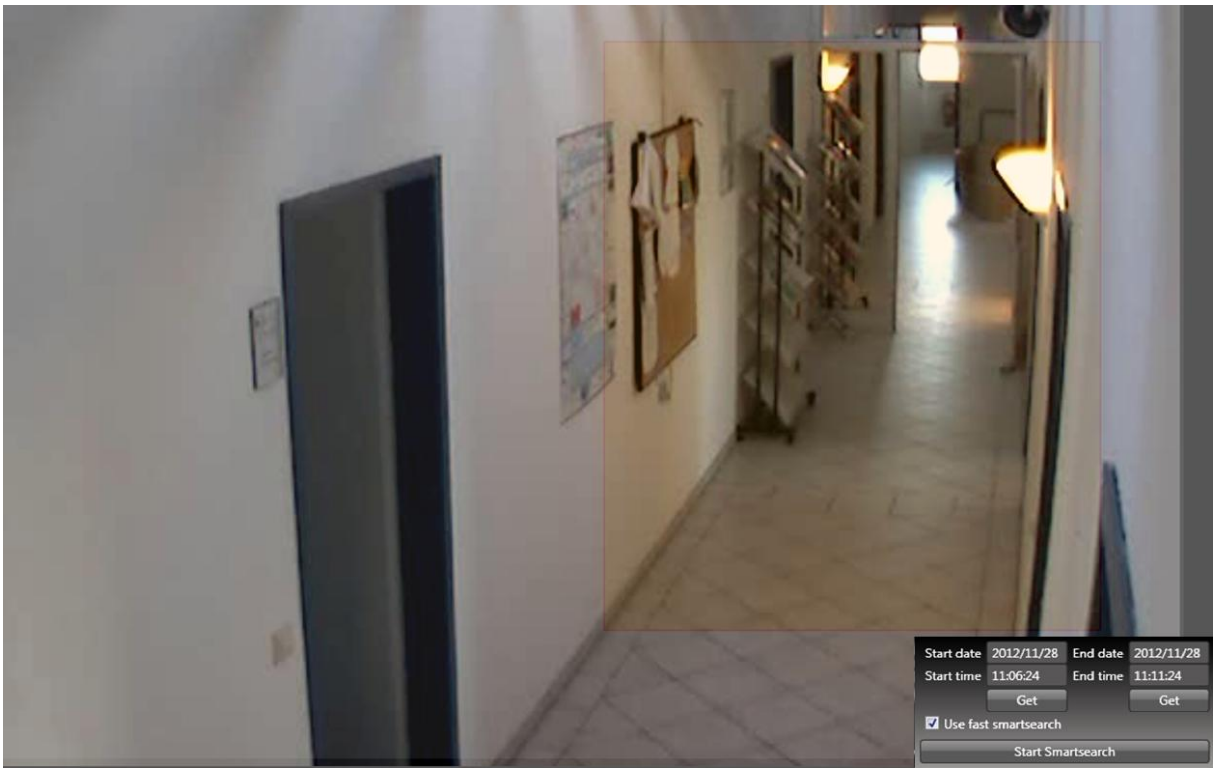
You may change both times by either manually entering other values into the respective fields, or by changing the slider's position and clicking the buttons below the start or end times.

If there is an active Fast SmartSearch video analysis (see Fast SmartSearch) for this camera the option will be shown. This option speeds up the search by using the movement detections of the Fast SmartSearch as they have been archived.

If there is no active Fast SmartSearch for this camera use press to access the search options like they are described in the chapter Fast SmartSearch.

Note: If has been choosen, the search will only run through the Fast SmartSearch results. If Fast SmartSearch has not been active during the complete search interval the search might not find all movements.

Before starting your SmartSearch run by hitting the button Start Smartsearch you will have to define your specific search area. Keep your left mouse button pressed to mark as many rectangular search areas within the camera's image area as you wish.

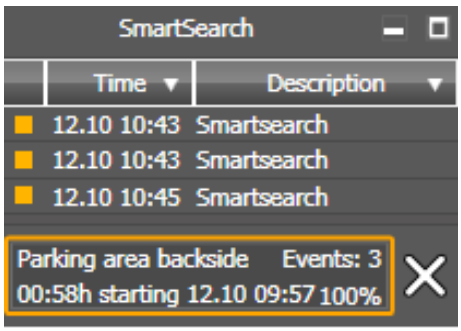


Once your SmartSearch run has been initiated, the progress of the search will be displayed in a separate area below the incoming alerts list.

This window displays the name of the camera, length and start of the time period to be analyzed, the number of current search hits and the percentage of the analysis progress; the latter being additionally illustrated by a light bar growing wider from left to right.

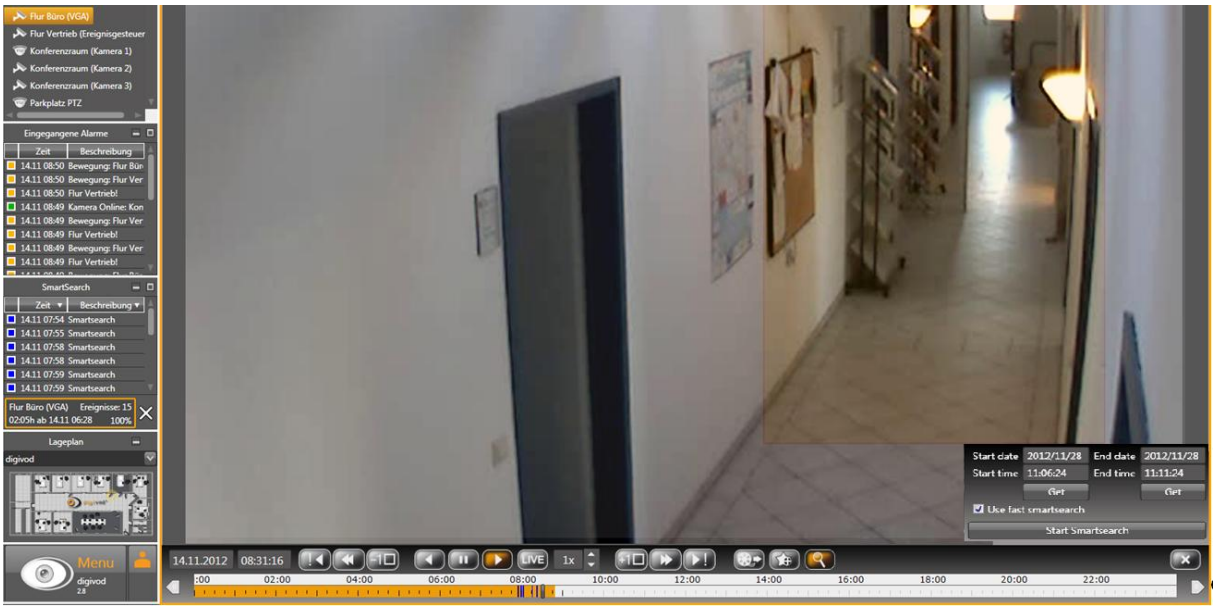
By left-clicking you may cancel your SmartSearch run.

The list of results for your SmartSearch run has the same structure as the list of incoming alerts (see List of incoming alerts).



Please note that by clicking on ☒ you will close the list of results and discard its entire contents!

You can display the video files pertaining to this SmartSearch run by double-clicking on a result line or using the context menu of this line (right mouse button). As long as your SmartSearch result line remains open all the results contained therein will also be displayed in the timeline (including, if applicable, any alerts existing for this period).



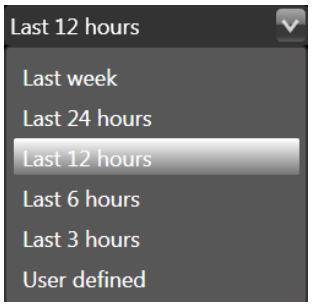
As an alternative for navigating via entries in the result list you may also directly position the slider, or use the digivod® player's standard navigation between results (see digivod® player).

4.11 QuickSearch

In archive mode press from the player to open the ‘QuickSearch’ and ‘SmartSearch‘ (see SmartSearch) function menu. By default the SmartSearch tab is selected. Click on QuickSearch to activate this tab.

With QuickSearch archived video data can be searched quickly to changes with the help of a structured thumbnail grid.

Click beside ‘Timespan‘ to select the period of time you want to search through.



Select User defined to define a free period of time as it is described in chapter SmartSearch.

Click beside ‘Open on’ to select the target screen for the QuickSearch results.

Click beside ‘Grid size‘ to select the number of thumbnails that shall be shown in the grid.

In the filed beside Min. interval in sec. you can enter the shortest period of time between two thumbnails. If a time zoom into the grid reaches this minimum QuickSearch will automatically start the player.

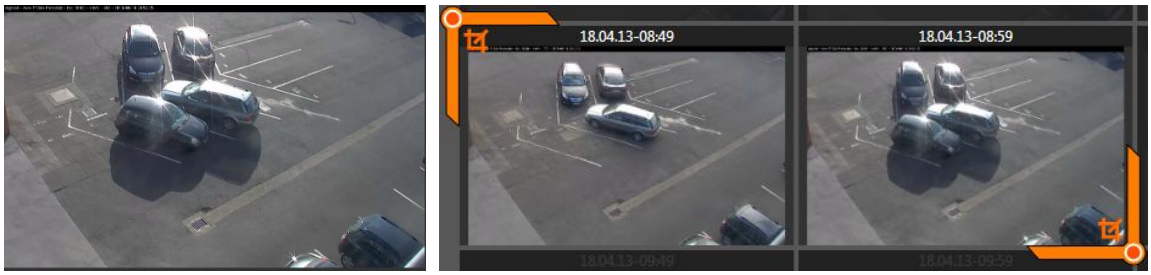
The following example shows the details about how to handle QuickSearch. After entering

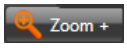
and pressing Start QuickSearch it shows the following result:

It shows how the monitored parking area has been filled over the last 6 hours. The period of 360 minutes is shown evenly distributed among the 36 displayed thumbnails - so the snapshots are at intervals of 10 minutes.

The two orange markers at top left and bottom right can be used to zoom into the time interval. Hold the left mouse button down and drag one of the two markers that is supposed to be the new beginning respectively the new end of the time interval.

If you want to find out, when the car on the left side in the fron has been parked, place the two markers on the thumbnails immediately before and after:

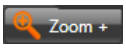


The press 

at the bottom of the windows. The result grid now shows a time interval of 10 minutes evenly divided on turn 36 thumbnails.

You can see that the searched vehicle was parked sometime between 8:55 and 8:56 o'clock.

Each additional zoom in step will reach the defined min. interval of 120 seconds and then start the player.

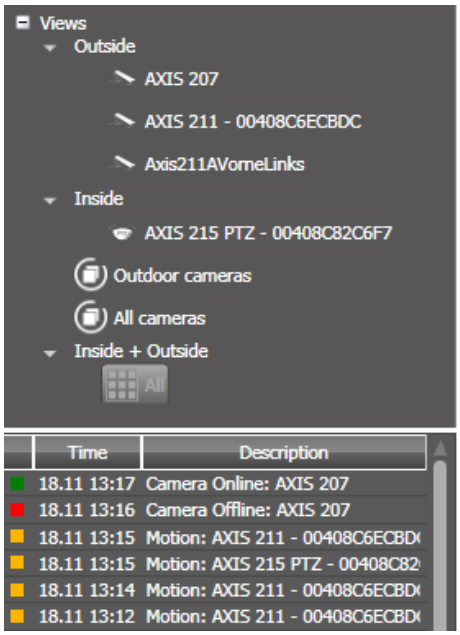
Note: Instead of zooming in by moving the markers and pressing 

you can also double click on the thumbnail that is supposed to be the new begin or end oft he searched interval.

4.12 List of incoming alerts

The digivod® observer main window below the navigation tree will display the most recent alerts in the list of incoming alerts at all times (if the rule for this alert does not explicitly suppress this (see Rules).

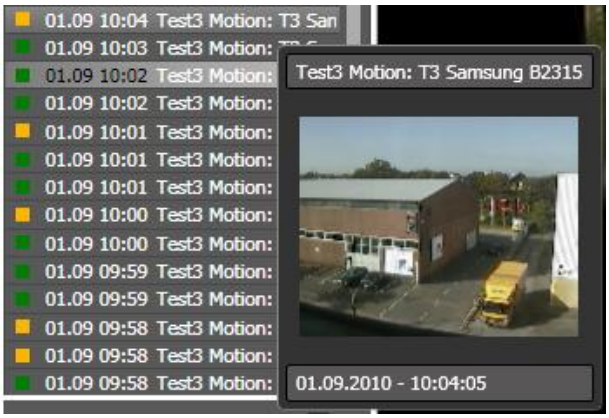
Note: Alarms that need to be confirmed remain at the top of this list until their confirmation. As a result the displayed order might differ from the default chronological order.



The colored dot in front of an alert list line indicates your alert priority: red = high, yellow = medium, green = low priority.

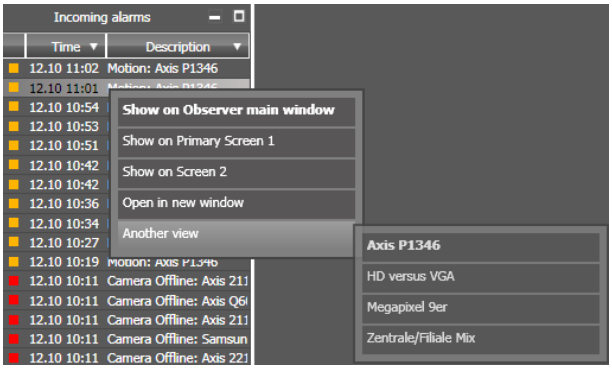
Note: Manually created bookmarks (see Bookmarks) will be marked in blue.

When you move your mouse cursor across an alert line, a preview window will open up automatically displaying an image of the event triggering the alert as recorded by the camera. This display window will close automatically after a few seconds.


01.09 10:04 Test3 Motion: T3 San
01.09 10:03 Test3 Motion:
01.09 10:02 Test3 Motion:
01.09 10:02 Test3 Motion:
01.09 10:01 Test3 Motion:
01.09 10:01 Test3 Motion:
01.09 10:01 Test3 Motion:
01.09 10:00 Test3 Motion:
01.09 10:00 Test3 Motion:
01.09 09:59 Test3 Motion:
01.09 09:59 Test3 Motion:
01.09 09:58 Test3 Motion:
01.09 09:58 Test3 Motion:
01.09 09:58 Test3 Motion:
Test3 Motion: T3 Samsung B2315
01.09.2010 - 10:04:05

Doubleclick an alert line contained in this list to open the archived image of the event triggering the alert within the Display area (see Display area).

Alternatively, you may open a shortlist by right-clicking an alert line. This list will enable you to select on which monitor you want to open the archived image of the event triggering the alert. Further down, under 'Another View', you can chose whether you wish to open the image of this particular camera only or rather a complete view containing this camera. In this menu you may also delete bookmarks (see Bookmarks) and, if applicable, SaveLocks created through these (see SaveLock).

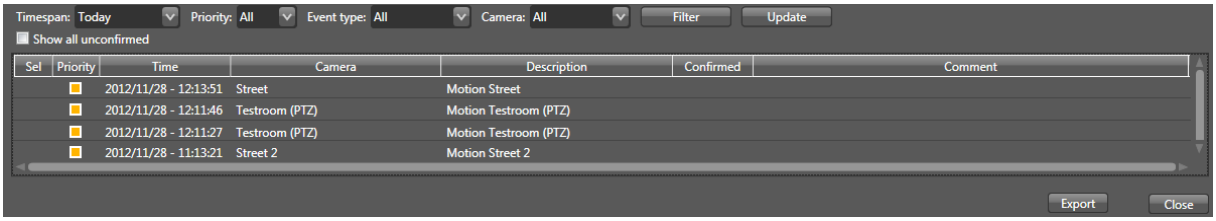


Irrespective of the player's current mode (see digivod® player) it will immediately switch back to single speed play forward mode whenever you do a direct jump into your archive by double-clicking the list of incoming alerts.

4.13 Alertlist

Using the digivod® main menu option

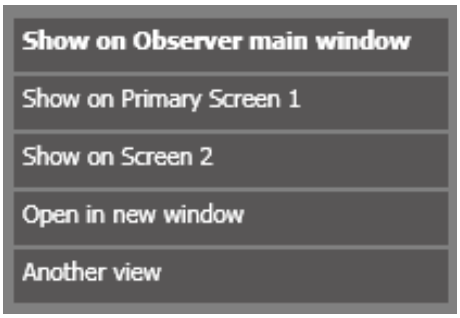
will open the alert list (see digivod® main menue).



Alertlist will archive all alerts until any corresponding video data has been deleted using digivod® cleaner (see digivod® cleaner).

By double-clicking an alert line, you will directly access the archives video of the event which triggered the alert. Irrespective of the current player mode (see digivod® player), when using the alert list this way, the player will then directly jump back to single speed play forward mode.

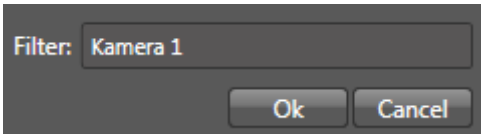
Alternatively, you may open a shortlist by right-clicking an alert line. This list will enable you to select on which monitor you want to open the archived image of the event triggering the alert. Further down, under 'Another View', you can chose whether you wish to open the image of this particular camera only or rather a complete view containing this camera. In this menu you may also delete bookmarks (see Bookmarks) and, if applicable, SaveLocks created through these (see SaveLock).



Alertlist header offers you filters, each of which may be applied to your entire alert list:

Open the selection boxes for filter fields using the adjoining buttons. Then, select filter values with a single left-click. You may select several filter criteria at the same time.

In addition the button Filter opens a window where you can enter a freely selectable text as a filter string.



After having entered your filter criteria, activate the filters you just entered by single left-clicking the button Update.

Now you can chose from the following filter criteria options:

Timespan	Today	Display any alerts of this day
	Yesterday	Display any alert of yesterday
	All dates	Displays all alerts
	Last 24 hours	Displays all alerts within the past 24h
	Custom	opens a dialog that offers a free day to be selected The selection can be made using the + and – Buttons or via a day calendar that can be opened clicking the Select button.
Priority (see Rules)	All	Displays all alerts
	Low	Displays low priority alerts only
	Medium	Displays medium priority alerts only
	High	Displays high priority alerts only
Eventtype	**Note:** This list only shows event types that have corresponding rules within the alarm management (see Rules)	
	Note: The name shown in this list is the alert type that has been defined as alert type in the property tab of the rule. (see Rules)	
Camera	All / cameras	Selection whether alerts from all cameras or from single cameras shall be displayed
Filter	Free text	Displays alerts containing specified filter text within their event text field (text column) only.

Click the button Export to export your current selection / filter of your alert list into a .csv file; close the alert list with the button Close.

4.14 PTZ control

With digivod® observer, you can directly control PTZ cameras (pan tilt zoom) in ‘live mode’ using a mouse or a DirectInput compatible joystick.

As early as during your installation process, PTZ cameras will be recognized as such (see New camera), and they will be marked with a symbol within both your navigation tree and your camera window (see Navigation tree).

In live views, PTZ functionality will automatically be mouse-activated whenever you move the mouse cursor across a PTZ camera image. If the PTZ mouse control is in active mode, the mouse cursor will indicate this mode by turning into a hair cross.

During enabled PTZ functionality, by single left-clicking any spot of the image you can control the PTZ camera (if technically feasible) in such a way as to drag this spot into the center of your display.

Holding down the CTRL key during mouse-based PTZ control will activate the PTZ joystick simulation. In this mode, the pan/tilt commands that are sent to the camera are depending on the distance of the mouse pointer from the center of the image (corresponding to the zero position of the joystick).

If available, the mouse scroll wheel can be used for zoom control (UP = zoom in / down = zoom out).

In a multiple view, PTZ cameras can be controlled using a joystick: to do this, simply mark the camera to be controlled with a single left-click.

Note: Move the mouse cursor across a single PTZ camera name to open the PTZ position menu (provided PTZ positions or PTZ tours have been defined previously). For further details see chapter PTZ position menu.

Note: Using optical PTZ functions (see Optical / digital PTZ) during your recording process will also change video data recorded with this camera.

4.15 Digital zoom / digital PTZ

When using digivod® observer with digital zoom & PTZ functions, even non-PTZ cameras can be deployed just like ‘genuine’ PTZ cameras.

digital zoom: You can control the digital zoom function using your mouse wheel (up = zoom in / down = zoom out).

digital Pan/Tilt: After zooming in, you can drag the image detail displayed within a particular view by clicking, holding and dragging the left mouse button within the camera view area.

Note: Digital PTZ may only be used within the camera view area. Digital zooming will enlarge pixel number while simultaneously decreasing video data quality if zoom level is above the physical monitor resolution. Unlike ‘genuine’ PTZ, digital PTZ will not affect your recorded image, i.e. independent of any PTZ changes made during the recording process, your full camera image will always be recorded in its previously defined resolution.

5. Administration

Open the administration menu by selecting the menu option

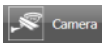
in the digivod® main menu (see digivod® main menu).

Note: Each digivod® administration dialog contains - in various locations - tabular overviews of the objects you have created (e.g. cameras, views, tours, users).

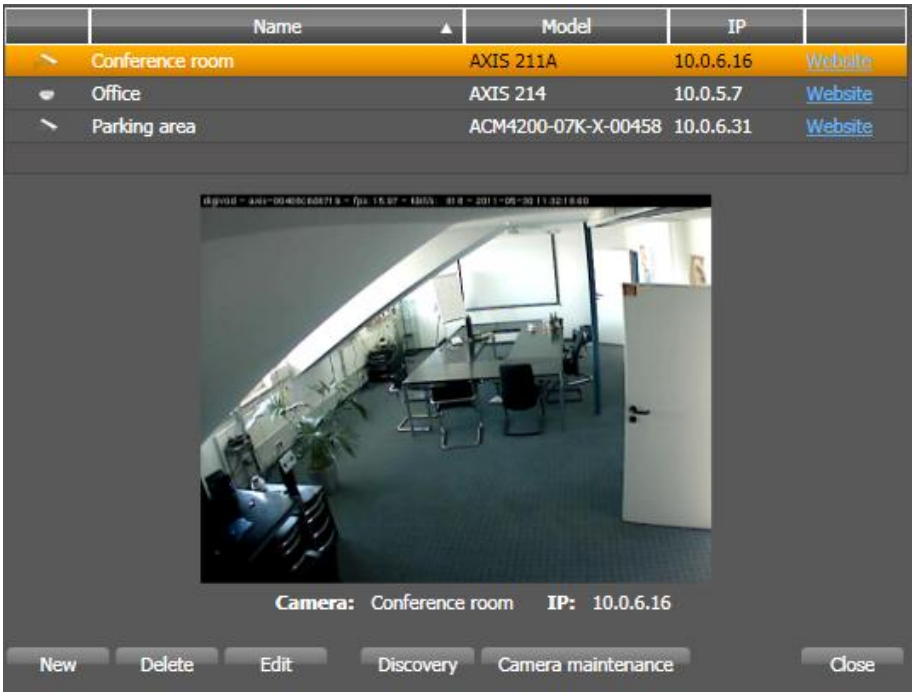
You can sort these tables according to your selected column's contents in an ascending or (after another single left-click) descending order by single left-clicking a specific column title.

Furthermore, you can vary the columns' order within the tables by holding the left mouse, moving the column you are holding to another location, and dropping it there.

5.1 Cameras

Selecting the menu option 

will open camera administration, enabling you to create, delete and parameterize individual cameras.



The synoptic table displays a list of all cameras which have already been created in your system.

The image below the table is a still image (!) of the camera selected in the table listed above and was taken during digivod® camera setup.

The first column represents the type of camera.

represents PTZ cameras.

represents any other camera type.

The second column lists the camera name that was either chosen during digivod® setup or imported from camera settings.

The third column displays the camera type the system automatically detected in its camera data during setup.

The fourth column lists the camera IP address for locating it on the network. The fifth column is a link to the camera's start page.

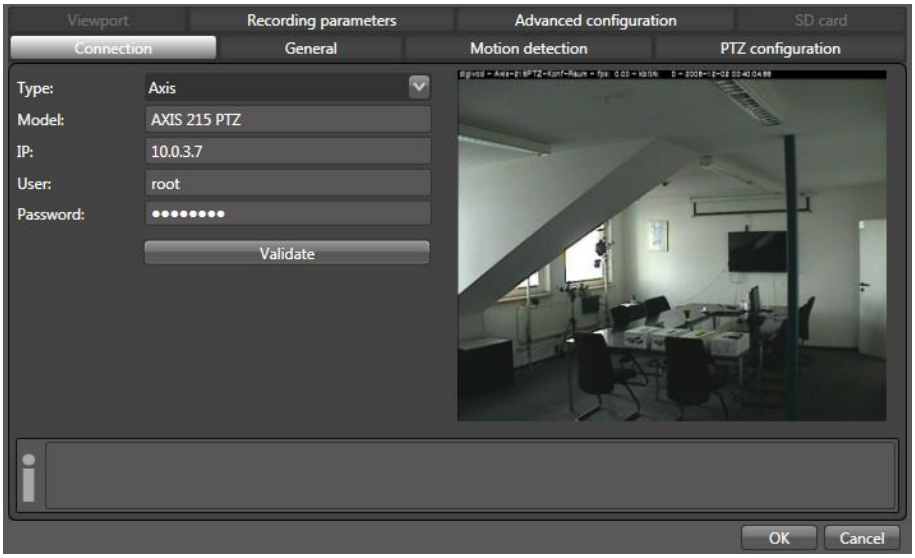
The fifth column offers a link to the cameras web page.

5.1.1 New camera (manual)

In order to create a New camera, make sure it has been physically connected to the network and can be accessed in terms of IP by our digivod® Server and/or client.

Cameras may be created manually using the New button, or automatically through the Discovery button (find cameras) (see New camera (automatic)).

Start installing a New camera by selecting the New button in the **Connection** tab.



Note: Depending on your digivod® license and depending on the specifications of the camera some tabs might be not active.

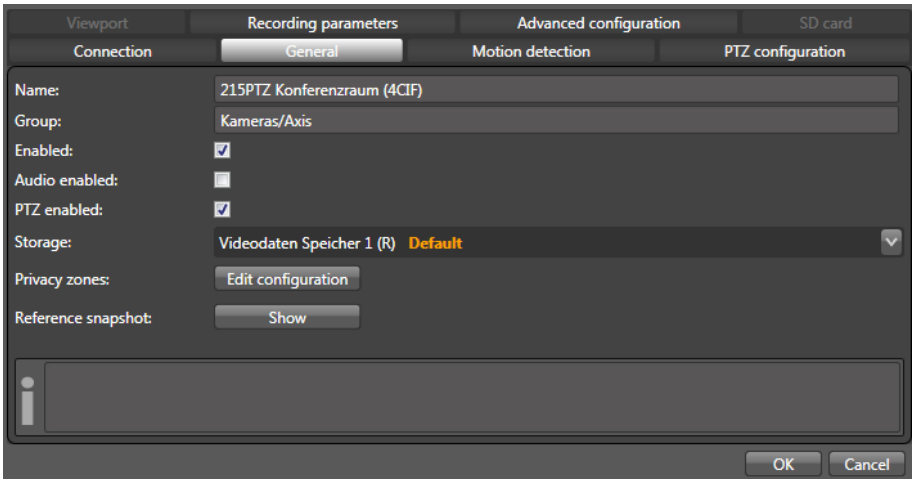
Now enter your camera manufacturer, IP connections and access data for administrator access to your camera. With New cameras, you will find this information in the camera manual. For cameras already set up, please contact your camera administrator. When selecting the Validate button, digivod® connects to the camera and, if successful, displays the current image of this camera as a still image(!).

Note: If you wish to create an ONVIF camera, please enter 'ONVIF' under 'Type'. For further details please go to chapter ONVIF cameras.

Note: The displayed image is the current reference snapshot of this camera (see Reference snapshots). It can be temporarily updated with the button Validate.

Important: Should you have changed the parameters directly on the camera, click on Validate to update the parameters in digivod®.

Subsequently, open the **General** tab.



Using this tab you can assign a name to your camera which will then be displayed later in your navigation tree.

Optionally, you can assign the camera to a specific group using the 'Group' field (see Groups). As a default the group name 'Cameras' is preset.

The check box 'Enabled' allows you to specify whether you want this camera to be enabled within the system. Only active cameras may be used for recordings and views.

The check box 'Audio enabled' helps you to specify whether you want any audio functionality (built-in microphone/connected loudspeaker, if applicable) to be enabled.

Note: Audio is only supported for certain Axis cameras.

The checkbox 'PTZ enabled' allows do activate or to deactivate PTZ-functions (only available for real PTZ cameras) (see Digital zoom / digital PTZ).

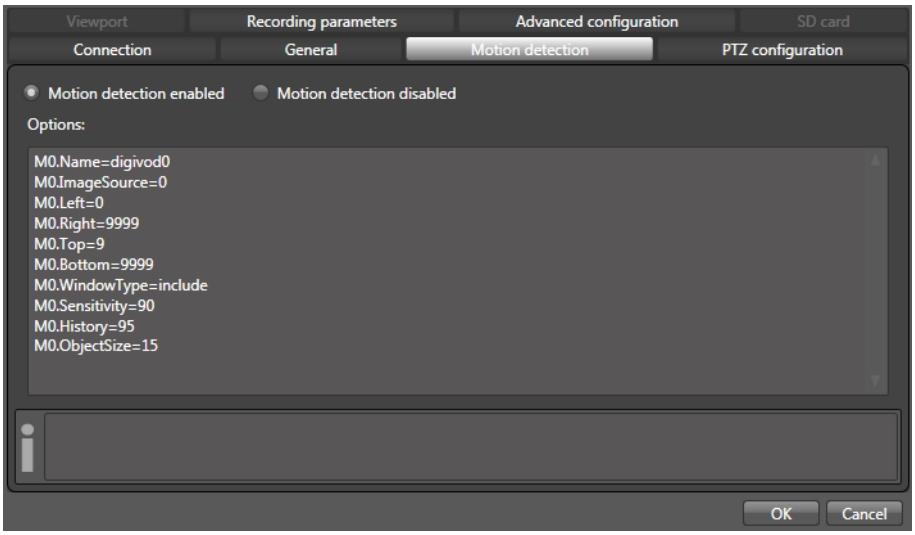
Note: If PTZ is enabled viewports are not available (see Viewports).

In the line 'Storage' you can select the storageset (see Storagesets) that shall be used to store the video data from this camera. By default the video directory that has been specified during the installation (see Installation and first steps) will be preset as default storageset for new cameras.

Use Edit configuration to open the configuration of privacy zones (see Privacy zones).

The button Show will open the dialog box for displaying and updating the reference snapshot for this camera (see Reference snapshots).

The next tab, **Motion detection**, enables you to switch in-camera Motion detection on or off (see Video sensor (Motion detection))



Note: The parameters of the motion detection shown here can only be changed on the camera.

The tab **PTZ configuration** (available only for PTZ cameras if PTZ function is activated) allows to define individual PTZ tours and to activate and deactivate single PTZ-presets (see PTZ configuration).

In the tab **Viewport** you can define a rectangular selection of a camera image as a separate viewport. Optionally viewports can be made available as PTZ positions (see Viewports)

Note: Viewports are not available for PTZ cameras if the PTZ function is activated.

In the tab **Recording parameters**, the parameters of the video data streams can be set and schedules for the recording generated and maintained (see Recording parameters).

The tab **SD card** (available only for cameras with internal SD card recording) allows to define the parameters for the video downloads of SD card recordings (see SD card recording).

The tab **Advanced configuration** allows to define special camera settings (see Advanced camera configuration).

5.1.2 Delete camera

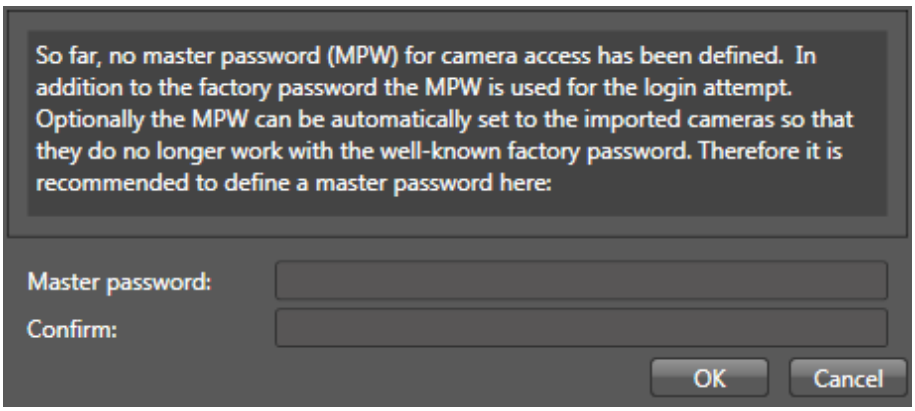
Press the Delete button to delete a camera selected from your digivod® summary table. You will be prompted for confirmation. Click OK to irrevocably delete this camera. Click Cancel to cancel this process.

5.1.3 Edit camera

Using the Edit button, you can change all the settings described under New camera (manual) for the specific camera you have selected.

5.1.4 New camera (automatic)

Selecting the Discovery function of your camera administration start menu will allow you to automatically set up cameras in digivod® which have been previously installed in your network. However, before starting a search run for installed cameras, please make sure to provide the required master password (MPW) for camera access (see Settings). When starting the search before a MPW has been entered the following dialog will pop up:


So far, no master password (MPW) for camera access has been defined. In addition to the factory password the MPW is used for the login attempt. Optionally the MPW can be automatically set to the imported cameras so that they do no longer work with the well-known factory password. Therefore it is recommended to define a master password here:
Master password:
Confirm:
OK
Cancel

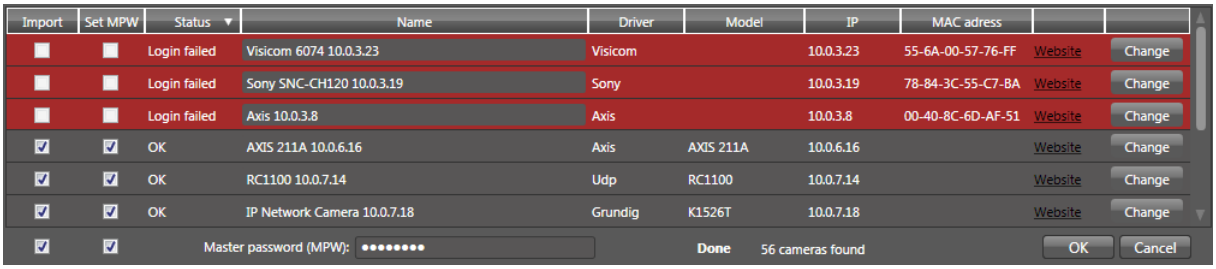
It is possible to start the search without entering a MPW but then the cameras found cannot be automatically set to the MPW. Cameras that have been set to MPW cannot be connected and cannot be imported.

Note: Depending on the number and type of cameras found in your network, the search run might take a very long time.

Note: For security reasons, some cameras may only respond to a search within the first few minutes after being switched on. These cameras may possibly not be located during an automatic search. Please refer to the information contained in your camera manual.

Note: ONVIF cameras cannot be located during an automatic camera search.

The results will be displayed within a summary.



In this case, the search run has detected 56 cameras that have not been previously installed in digivod®.

Lines marked in red show cameras that neither have the factory passwort nor the MPW. These cameras cannot be imported automatically.

The other lines show cameras that could be connected. By default the checkboxes ‘Import’ and ‘Set MPW’ are marked for these cameras. You can deselect these marks by direct click on the mark or deselect the whole column by click on the checkboxes at the bottom of the list.

Die anderen Zeilen zeigen Kameras, zu denen mit einem der beiden Passworte erfolgreich eine Verbindung aufgebaut werden konnte. Standardmäßig sind für diese Kameras die Spalten „Import“ und „Setze MPW“ markiert. Diese Markierungen können entweder einzeln oder über die beiden Checkboxen unterhalb der Liste zurückgesetzt werden.

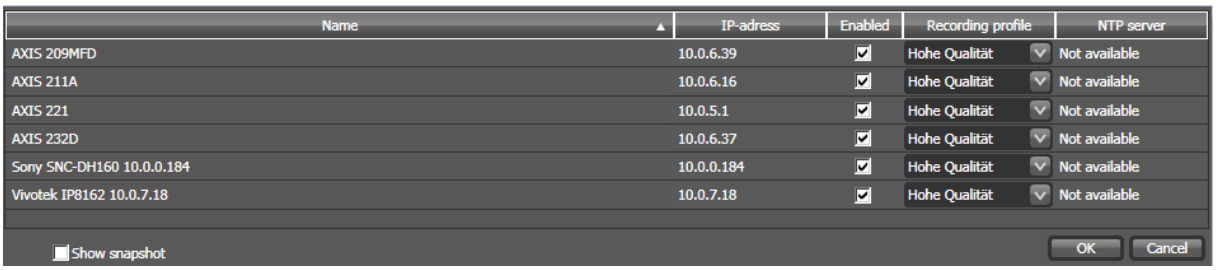
Use Change at the end of a line to open the dialog for manual camera administration (see New camera (manual)). In this dialog connection parameters and camera name can be edited before importing the camera. Use this button also to enter correct connection data for cameras that are marked red.

Click OK, to import the cameras that have been selected in the ‘Import’ column. Pressing Cancel will discard your search results and close your search result window.

5.1.5 Camera maintenance

The dialog ‘Camera maintenance’ that can be started from main window of the camera administration (see Cameras) offers a quick and easy way to edit camera names, to change current recording profile and to activate and deactivate single cameras known in the system.

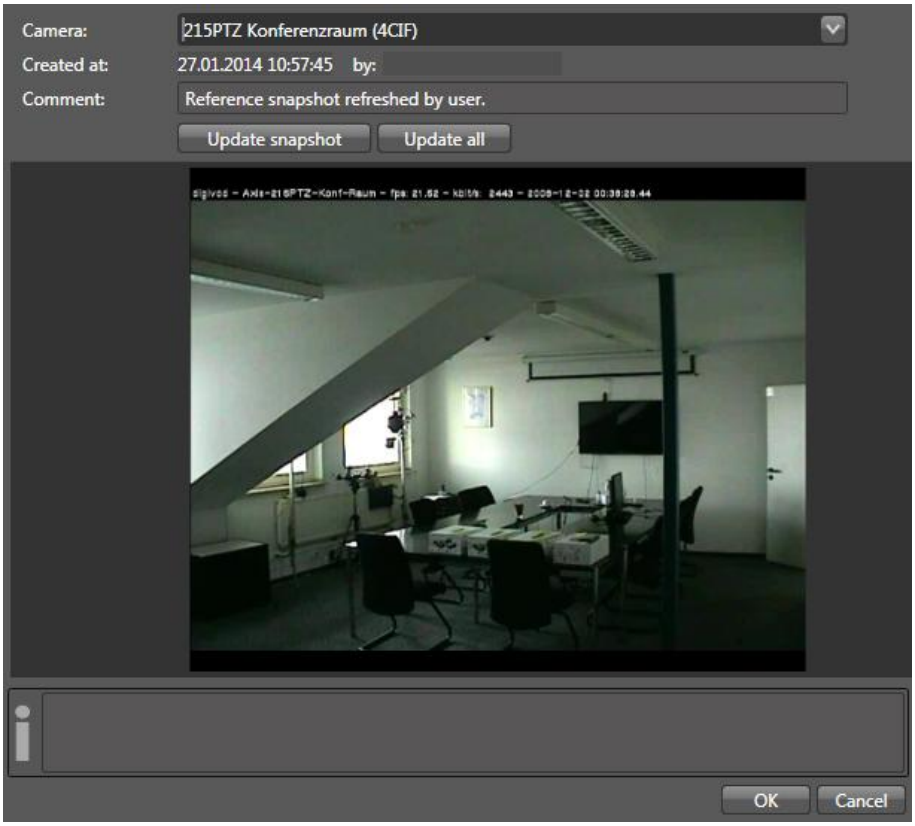
If ‘Show snapshot’ is activated the current snapshot of this camera will be shown, when mouse is over a camera row.



5.1.6 Reference snapshots

For each camera, a reference snapshot is created automatically during the installation and stored internally. Reference snapshots are used in the camera report (see digivod® system information), for the offline display of cameras (see Display area) and shown in the camera administration (see Cameras and New camera (manual)).

The function reference snapshots in the start menu of the camera administration (see Cameras) and in the tab General of the administration of a single camera (see New camera (manual)) makes it possible to update the reference snapshots stored in the system.



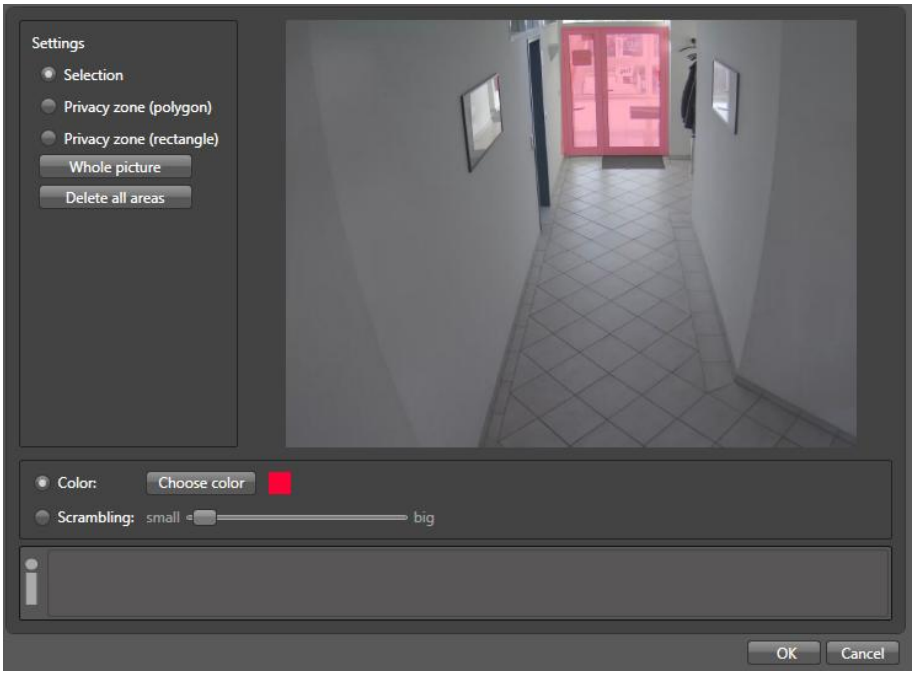
With Update snapshot only the currently displayed snapshot will be updated. With Update all you will update all reference snapshots stored in the system.

Important: Only one reference snapshot per camera is stored. Previous reference snapshots are irrevocably overwritten by the update.

5.1.7 Privacy zones

Privacy zones can be configured as monochromatic non-transparent image overlays or as pixeled areas in order to make parts of a camera image irrecognisable.

To set and change a privacy zone, open the configuration out of the camera administration with the button Edit configuration (see New camera (manual)).



Choose "Privacy zone (polygon)" or “Privacy zone (rectangle)” and press the left mouse button in order to define the area to be masked (or to be pixeled) as free polygon or as rectangle.

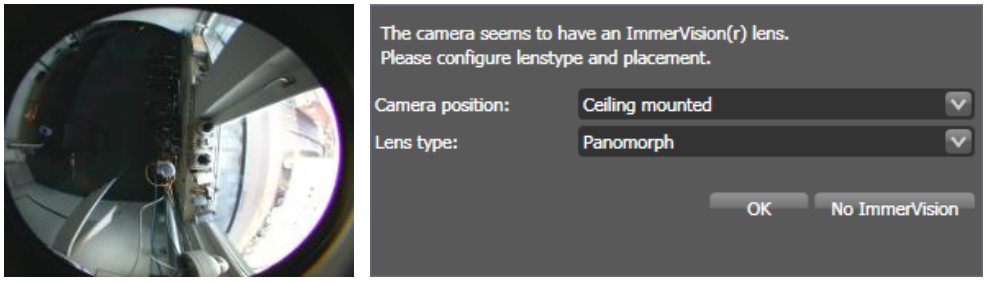
To change defined privacy zones in the preview window, first choose "Selection". By clicking the right mouse button within the preview window already defined privacy zones can be selected. A selected privacy zone can be changed by moving, deleting and adding stations, as desired. Use the right mouse button to delete superfluous stations from the border line and the left mouse button to add further stations on the border line. A highlighted station can be moved with pressed left mouse button, as desired. A privacy zone selected in its centre can be moved with pressed left mouse button, as desired. With the right mouse button a context menu will open with which the existing privacy zones can be selected and deleted.

Note: By default, the user Admin has the rights to "deactivate privacy (live)" and "deactivate privacy (archive)" (see Privileges (user groups)). For this reason the privacy zones and privacy protection areas are displayed without pixelation for the Admin (see Privacy Protection).

5.1.8 Cameras with ImmerVision 360° lens

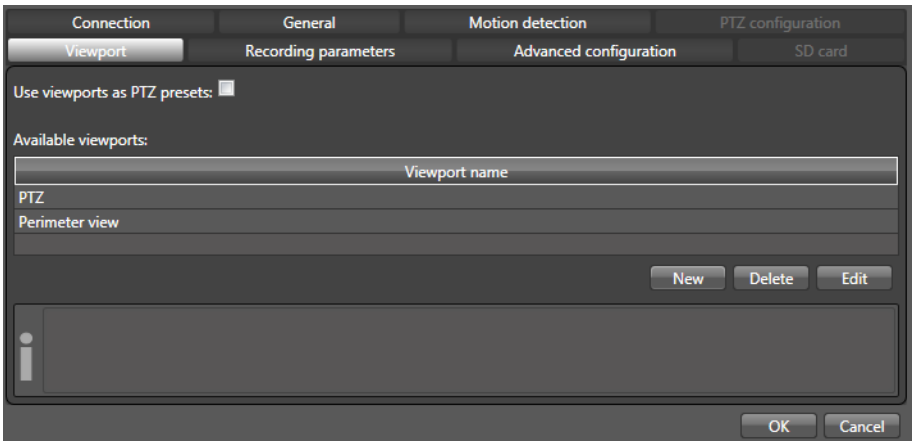
If a camera is equipped with an ImmerVision 360° lens, this will be recognized automatically due to the characteristic 360° view when updating the snapshot with the Validate button.

A dialog box asks to select the camera position and the exact lens type. If digivod® wrongly detected the ImmerVision lens, cancel this dialog with No ImmerVision, otherwise confirm your selection with OK.



Note: The ImmerVision® 360° is not detected and cannot be used with digivod® if there are active OSD overlays in the camera view.

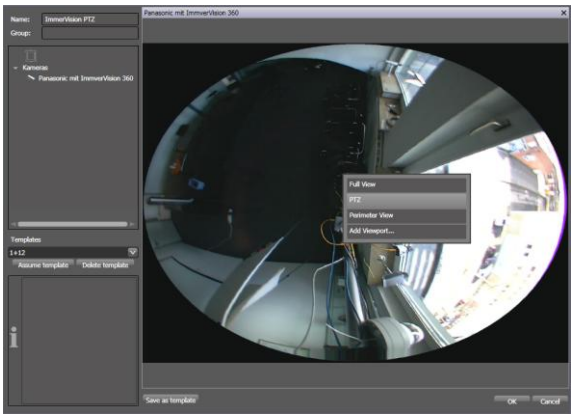
Within the digivod® software ImmerVision® specific views are stored as viewports. Two default viewports named “PTZ” and “Perimeter View” are automatically created, others may be created manually (see Viewports). Like using a ‘real’ PTZ-camera viewports can be made available as PTZ positions (see PTZ position menu) when activating the corresponding checkbox in the viewport tab.

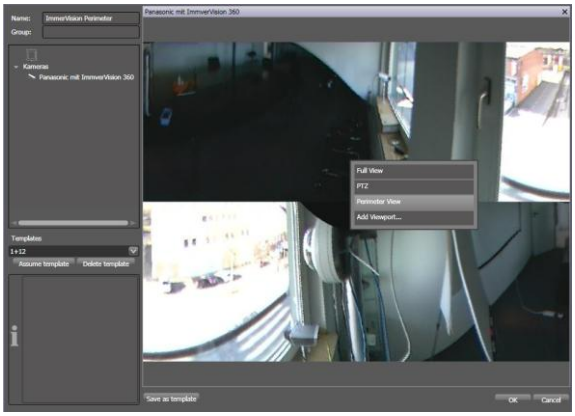


Note: The ‘Perimeter View‘ cannot be used as PTZ-position.

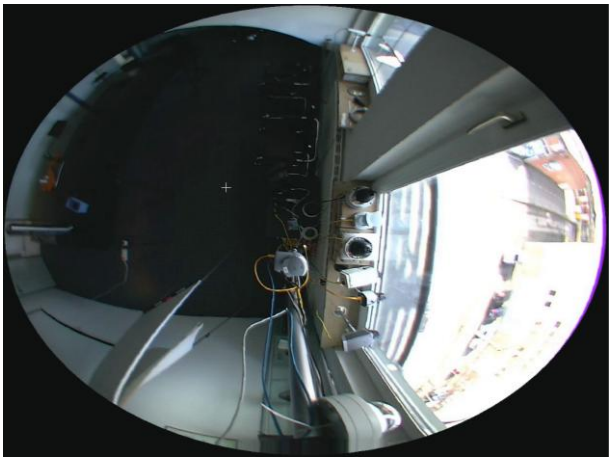
PTZ is the default viewport when opening the camera from the navigation tree (see Navigation tree). It shows the total overview and allows to zoom in and to navigate using the regular PTZ-controls of digivod® (see PTZ control).

When inserting a camera with ImmerVicion® lens into a view (see Views) the context menu via the right mouse click allows to select the viewport that shall be shown.





When opening the PTZ viewport the cursor changes to a crosshair (like using a ‘real’ PTZ camera). Single leftclick changes the PTZ position the zoom can be activated via the mouse wheel.



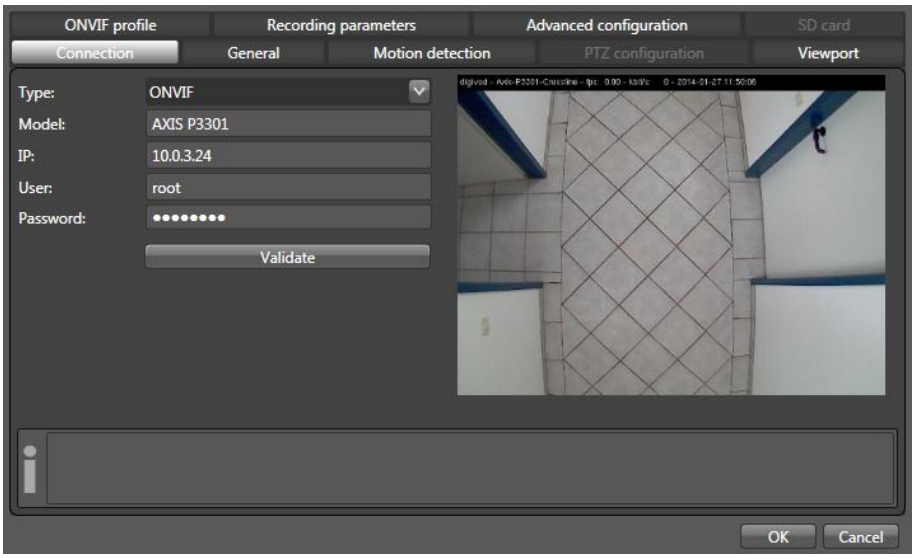
Userdefined viewports only offer digital zoom but no digital PTZ (see Digital zoom / digital PTZ).

Note: Unlike using ‘real‘ PTZ-cameras all the above described functions are also available when accessing the video archive.

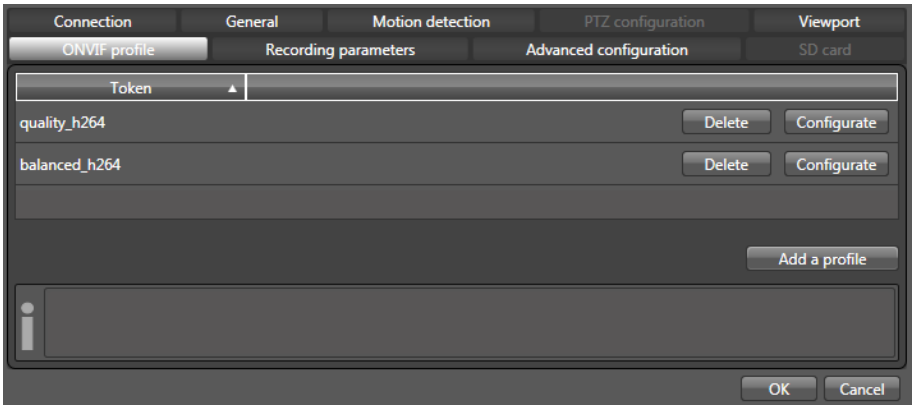
5.1.9 ONVIF cameras

In digivod®, cameras compatible with ONVIF may be created manually. The creation process itself is identical to creating other cameras (see New camera); under ‘Type’, please enter ‘ONVIF’.

For an ONVIF camera you will be shown an additional tab in your camera administration once it has been created successfully; in this tab, you can opt to have all the available profiles in your camera to be displayed or edited.



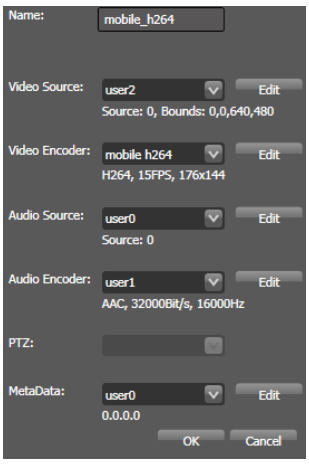
The type and number of available ONVIF profiles will depend on your specific camera and its manufacturer. For a list of pre-installed profiles for your camera please refer to your camera manual.



The first row displays the name of the profile as defined in your camera. Using the button Remove you may remove an individual profile.

Note: You will NOT be prompted for confirmation!

Click the button Configurate to open the dialog for changing parameters of an existing profile.



Each line has its own drop-down menu for selecting predefined settings; you may open the menu using .

Please note that the adjustment options offered therein will depend on your specific camera and its manufacturer. For details please refer to the information contained in your camera manual.

Once you have chosen a predefined setting you may further adjust it using the Edit button. Please note that these adjustment options will likewise depend on your specific camera and its manufacturer.

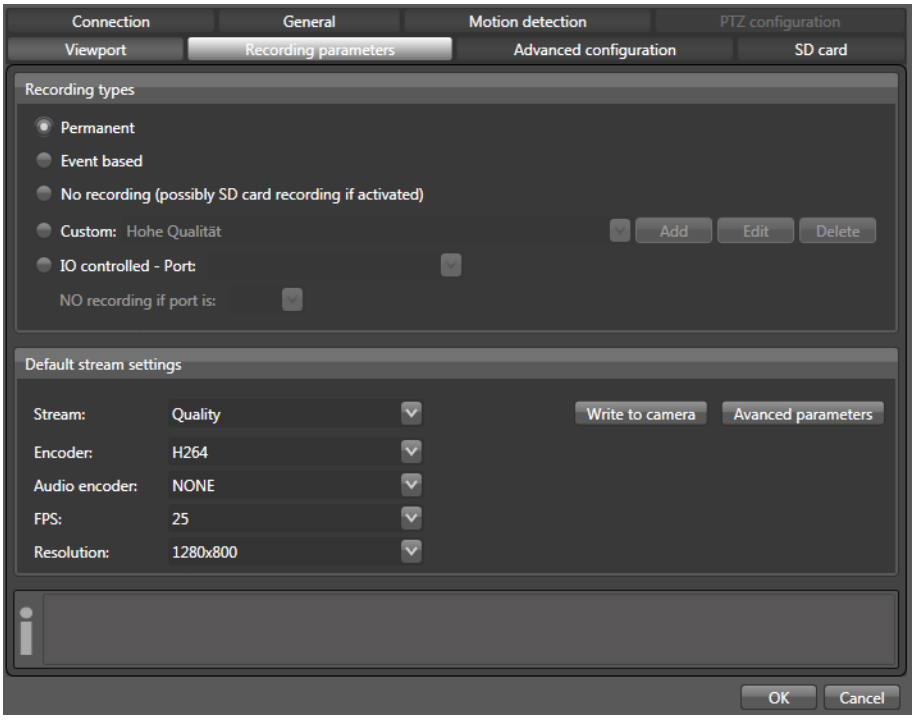
Use the button Add Profile to create completely customized profiles and save these on your camera.

Before entering any information into your configuration template fields you will need to type in a name for your new profile and press the button Create.

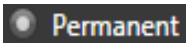
5.1.10 Recording parameters

The live display and recording of video data requires the retrieval of at least one video data stream from the respective camera. In the tab "Recording parameters", the type of recording is selected for each camera and the most important parameters of the streams can be defined or selected.

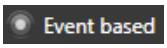
Names and number of streams that are on a camera or can be stored depend on the camera manufacturer and camera model. In digivod® three different streams per camera can be defined or selected. By means of schedules you can control when which stream is to be active.



Under **Recording types** you choose first when digivod® is to record the video data of the selected camera:



Permanent recording with the default stream (see below)



The video data of this camera is only archived if at least one event which is assigned to this camera has been registered. In this case the video data with the pre and post alert times defined in the settings for the storagesets are archived (see Storagesets and Alert triggered archiving). Event-triggered recording is always done with the default stream (see below).

Important: A motion event triggers an event-controlled recording even if no alert rule is active for this event. Such an event does not appear in the alert lists and is invisible in the timeline, but can be accessed by or in the timeline navigation.

The video data of this camera is not recorded by the digivod® server. This option allows the manual recorder control via the system status display (see System state display) and via the camera function symbols or (see Manual recording). Also, when choosing this option, the recording can be controlled by the rule action "Manual recording" (see New rule).

The video data of this camera will be recorded in the selected way (see above). In this user-defined type of recording it is possible to create, change and delete schedules for the recording parameters with the buttons Add Edit Delete (see Schedules for recording parameters).

The alternatives Permanent (Alternativstrom 1) or Permanent (Alternativstrom 2) will set the stream for the live display and the recording of this camera permanently on the parameters that have been defined for these two streams under Avanced parameters (see below).

Under **Default stream settings** you will set the most important parameters of the default stream. The default stream is the video data stream that is used by default for the live display and the recording when no schedule is active.

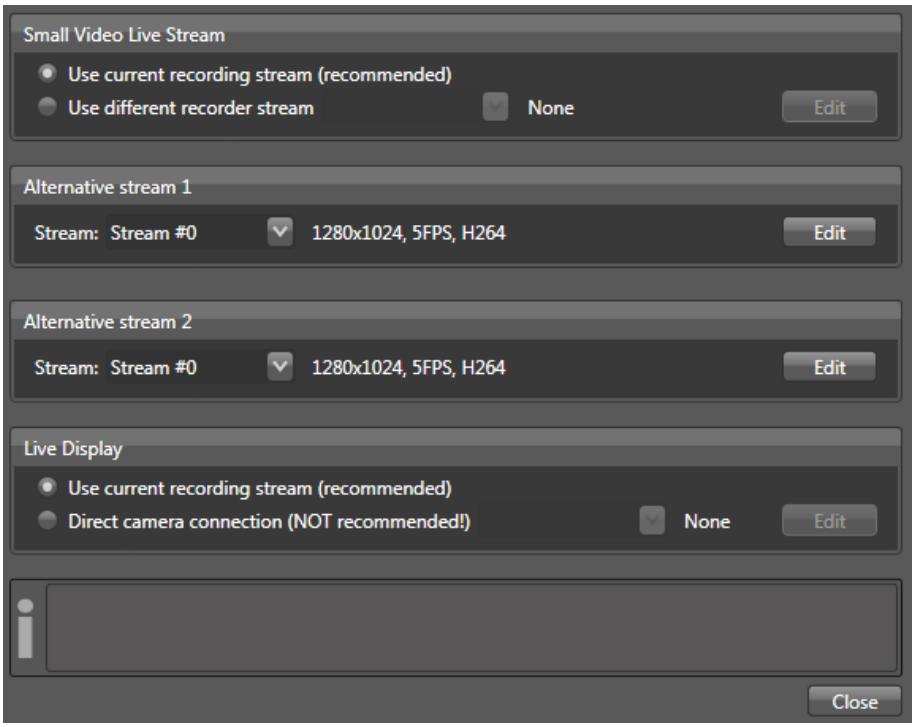
In the drop-down box after Stream, one of the streams defined on the camera with the respective parameters can be selected as default stream for digivod®. After the selection these parameters will be shown in the fields below. They can be edited there and stored with Write to camera.
Note: Additional parameters used by the camera for the encoding of the video data (e. g. the compression rate or the GOP value) can only be changed in the respective stream parameters directly on the camera.

Important: Should you have changed the parameters directly on the camera, click on Validate in the tab "Connection" of the camera administration to update the parameters in digivod®.

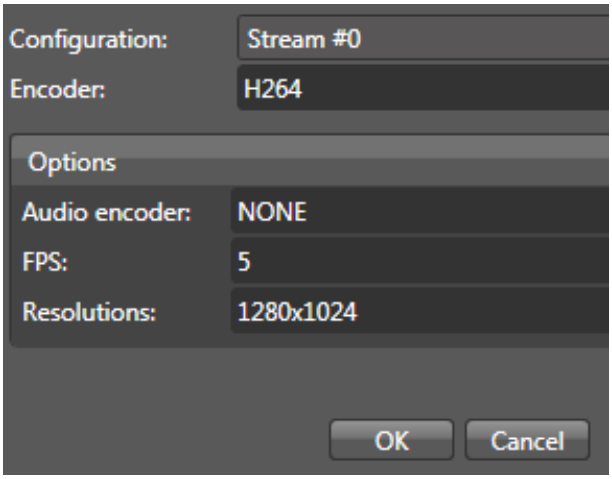
Note: For cameras not providing their own streams, the standard streams with the names MJPEG, MPEG4 and, if available on the camera, H264 are predefined.

With the button Avanced parameters you will open the dialog box for defining the two alternative streams and the live streams for direct camera connections.

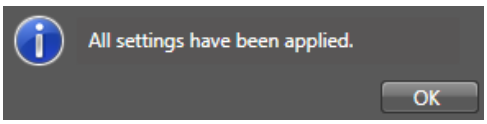
Under **Alternative stream 1** or **Alternative stream 2**, you will select after Stream, similar to the default stream, the stream defined on the camera that you intend to use, possibly using schedule control (see Schedules for recording parameters).



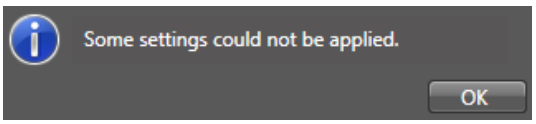
With Edit you will open another dialog box that enables you to change the most important parameters of the streams and to write them on the camera.



After acknowledging with OK, digivod® saves the selected settings for the multichannel profile on the camera or internally. There is a corresponding message regarding the result.



bzw.



For the live display of video data it is strongly recommended to use the setting Use current recording stream (recommended). In case of this setting, all active digivod® observers (clients) use the data stream currently retrieved by the camera for the recording also for the live image.

There might be exceptions where it is necessary to retrieve the data for the live image from the camera via another profile. With the activation of the setting Direct camera connection (NOT recommended!) the subsequent stream selection is activated and a stream for the live image can be selected.

Important: The selection Direct camera connection (NOT recommended!) results in the fact that in case of different streams for live image and recording the camera has to provide two parallel video data streams simultaneously (in case of simultaneous access of several digivod® observers (clients) possibly even more!) Please observe the documentation of the camera manufacturer if and to what extent this functionality is supported. Especially in the case that already one stream with highest resolution and high frame rate is provided, a lot of cameras cannot provide additional data streams even though they are basically capable of multi-streaming!

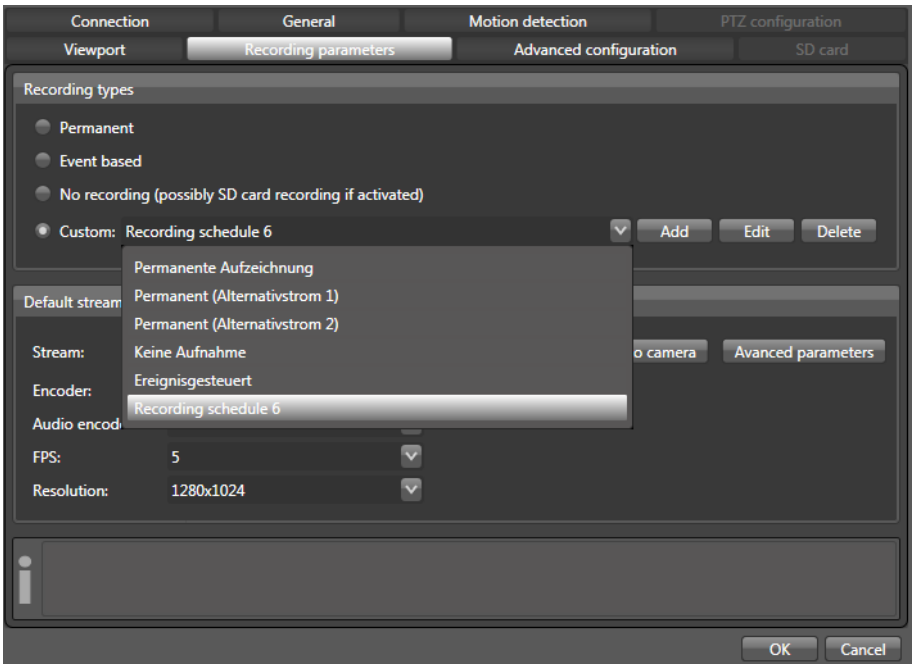
Note: If the option Remote (WAN) access has been selected in the observer login, the video data for live images will be transcoded in H.264, which is resolution and bandwidth optimised.

Important: The selection of the video encoder, the setting of frame rate and image resolution are to be calculated carefully as a function of the requirements of the application, the required archiving period, the network capacity and of the storage space available for the archive. Some camera manufacturers offer calculation tools for determining the storage requirements and the network load. For further information please contact the digivod® Support.

5.1.11 Schedules for recording parameters

For the recording type Custom: (see Recording parameters), schedules can be created, changed and deleted with the buttons Add Edit Delete, which define at what times which stream is to be used for the recording.

To select an already created schedule for a camera, open a drop-down box of all available schedules with the button ⌄ at the top of the tab **Recording parameters**.



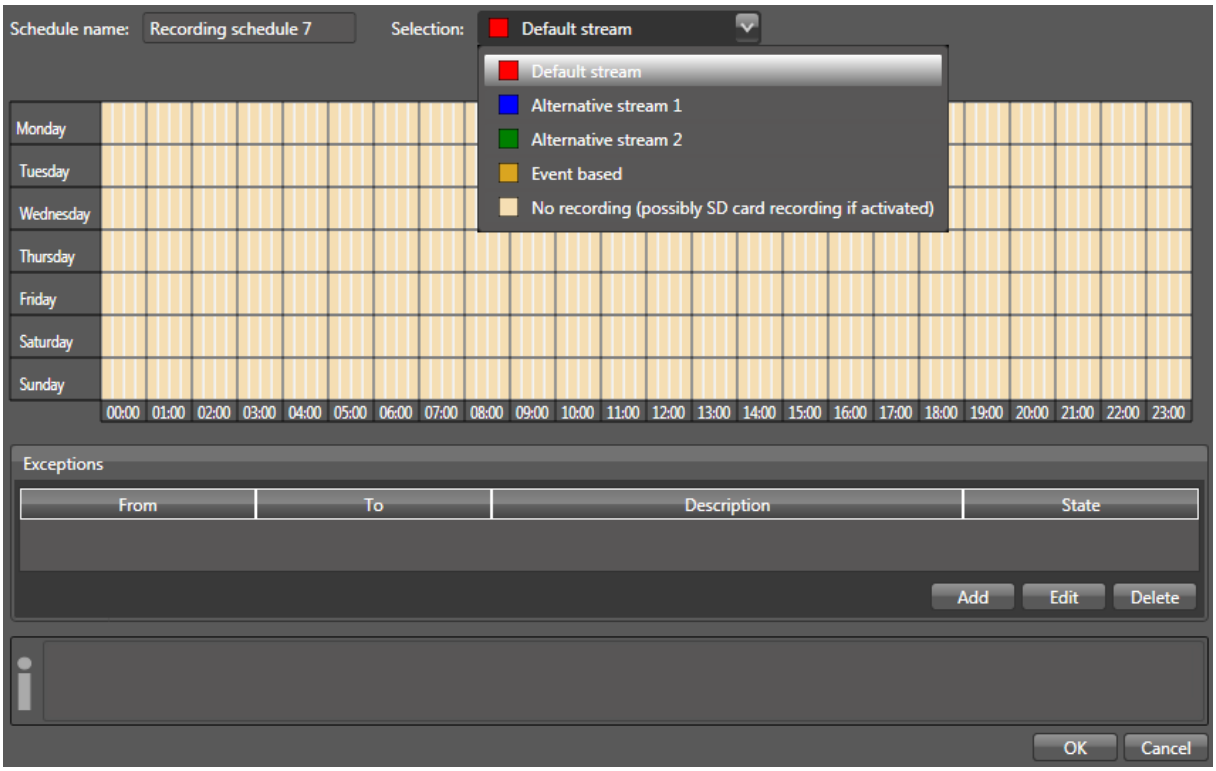
Note: The selection of the schedules "permanent recording", "event triggered" and "no recording" have the same function as the corresponding selection of the above radio buttons. They are included in this list for compatibility reasons.

5.1.11.1 New schedule for recording parameters

With the button Add you will start the new creation of a schedule. The following box shows an empty graphic week-at-a-glance with a quarterly hour grid.

Note: An empty schedule as shown here in the figure always has the setting "no recording (possibly SD card recording, if activated)" at first (see SD card recording (general settings) and SD card recording (camera settings)).

Note: The setting "no recording (possibly SD card recording, if activated)" makes the manual recorder control possible via the system status display (see System state display) or via the rule action "manual recording“ (see New rule).



First, enter a name under which this schedule is to be stored. Under this name the schedule can be used later in the drop-down list for this and also for other cameras (see Schedules for recording parameters).

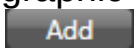
Then, select the setting whose validity period you would like to highlight subsequently with one left click in the drop-down box following the word Selection. You can choose from the three possible streams as defined in the recording parameters (see Recording parameters) or the setting to record event triggered or not at all.

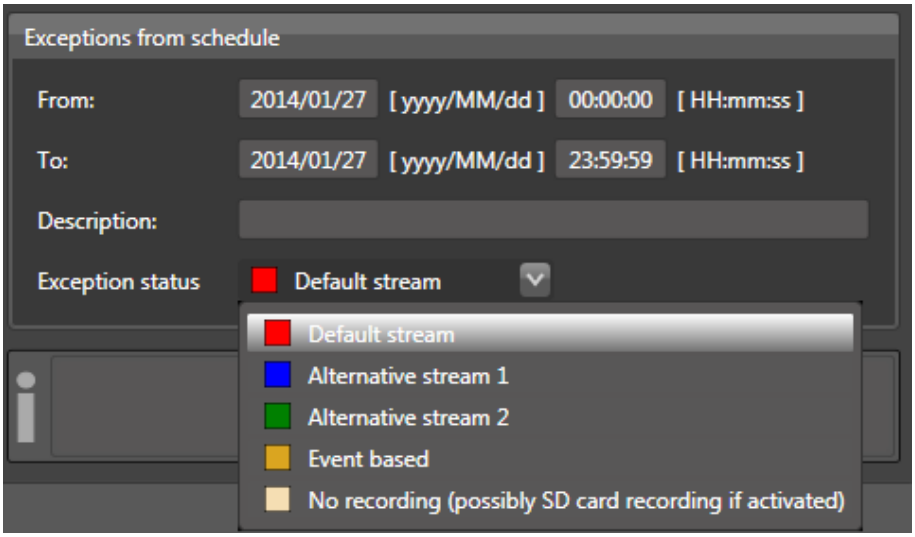
Important: Please take into account that the time for switching between two streams can vary depending on the camera. By switching the stream a recording gap can arise.

By drawing across the respective time windows in the week calender using the pressed left mouse button, you can highlight at what times this stream is to be used. With one left click anywhere in the schedule, you can highlight the briefest time unit of 15 minutes individually.

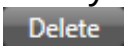
The setting "event based" makes it possible to define time windows in which the video data of this camera is only archived when at least one event allocated to this camera has been recorded. In this case the video data with the pre and post alert times defined in the settings for the storagesets are archived (see Storagesets and Alert triggered archiving).

Important: A motion event triggers an event based recording even if no alert rule is active for this event. Such an event does not appear in the alert lists and is invisible in the timeline, but can be accessed by or using the timeline navigation.

Optionally, exception times can be defined in any schedule. Below the graphic week-at-a-glance, exception times are shown in a table. With  you will open the box to define an exception time.



After "From" and "To" you enter to the second from when until when this exception is to be active. After "Description" you can optionally enter a descriptive text regarding this exception (e. g. the name of a public holiday in case of an all-day exception). After "Exception status" you select the stream or the setting which is to be active during the period of exception.

A fully described exception period is stored with . With or  an exception period can be changed or fully deleted.

A complete schedule is stored with OK.

5.1.11.2 Delete schedule for recording parameters

With the button Delete the schedule for recording parameters selected from the drop-down list can be deleted from digivod® . A confirmation prompt will appear. Click on OK to delete the schedule irrevocably. With Cancel you will abort the process.

Note: After deleting a schedule for one camera, this camera and all other cameras that used this schedule will automatically use the default stream as defined in the recording parameters (see Recording parameters).

5.1.11.3 Edit schedule for recording parameters

With the button Edit an existing schedule for recording parameters can be changed as described under Schedules for recording parameters.

Note: The changes apply for all cameras using this schedule.

5.1.12 PTZ configuration

In this menu PTZ tours, PTZ schedules and visibility of existing PTZ pre-settings can be defined (see PTZ position menu). A PTZ tour is a fixed sequence of PTZ positions which a PTZ camera will move into independently once the PTZ tour has been started.

Note: PTZ tours can also be created for viewports of non-PTZ cameras if the option 'Use viewports as PTZ positions' has been activated (see Viewports)

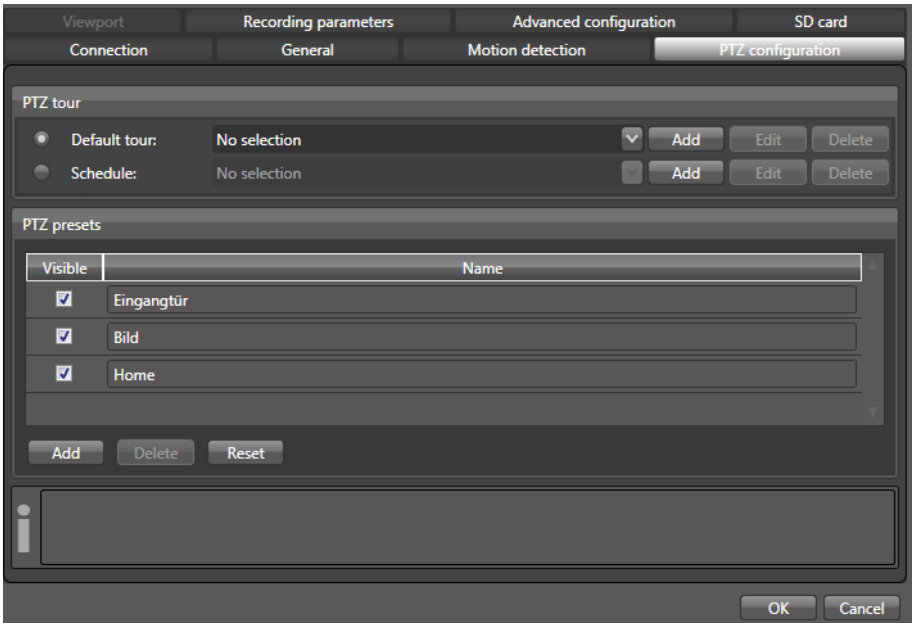
Note: Special PTZ properties can be administered in the advanced camera configuration (see Advanced PTZ properties).

PTZ positions on 'real' PTZ cameras must be defined directly on the camera before they can be used within a PTZ tour (see PTZ position menu).

Note: After creating or modifying PTZ positions on the camera press Validate to update the PTZ position list within digivod®.

Also PTZ schedules can be created in this tab. A PTZ schedule defines whicht PTZ tour shall be active at what time.

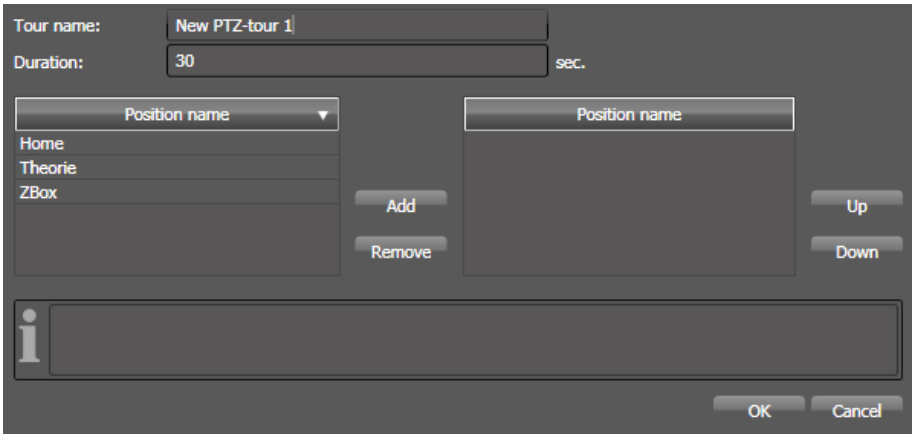
After creating a 'real' PTZ camera within digivod® there will be 'No selection' for default tour as well as 'No selection' for schedule for this camera.



Use the checkbox in the column named 'Visible' to activate or deactivate single PTZ positions. Deactivated PTZ positions can be used for PTZ tours but they cannot be used in the PTZ position menu (see PTZ position menu). Deactivated PTZ positions can be used for PTZ tours.

Note: Use Init to overwrite the currently shown PTZ presets with the current camera settings.

Create a new PTZ tour using the New button. To the left of the following window you will find all PTZ positions which have been extracted from your camera.



Enter the name for the tour to be saved as into the field ‘Tour name’. Subsequently, you will be able to select this tour within the selection field ‘Default tour’ in your input window for this PTZ tour.

Please enter the time (in seconds) you want your camera to remain in every single PTZ position into the field ‘Duration’.

Pressing the buttons Add and Remove will allow you to import any PTZ position previously selected with a single left-click into your tour, or remove it again from the tour. Furthermore, one single position may also be imported several times into a PTZ tour.

The Up and Down buttons will help you change the sequence of PTZ positions imported into the tour by moving and sorting each PTZ position previously selected with a single left-click into a higher (up) or lower (down) position.

You may define several PTZ tours for one camera; however, you will only be able to use the tour in the PTZ position menu (see PTZ position menu) that has been selected from the list of ‘Default tour’.

Note: Selecting ‘None’ from the list of ‘Default tour’ will disable any functionality of your PTZ tours within your PTZ position menu.

You can delete the PTZ tour you have previously selected in your summary list from the digivod® system using the Delete button. Edit the abovementioned settings of the selected PTZ tour using the Edit button.

Use in the line behind ‘Schedule’ to start the creation of a new PTZ schedule. The following dialog is corresponding to the schedule creation for camera settings (see Schedules for recording parameters). The only difference is the content of the list behind ‘Selection’. This list will show existing PTZ tours instead of camera profiles.

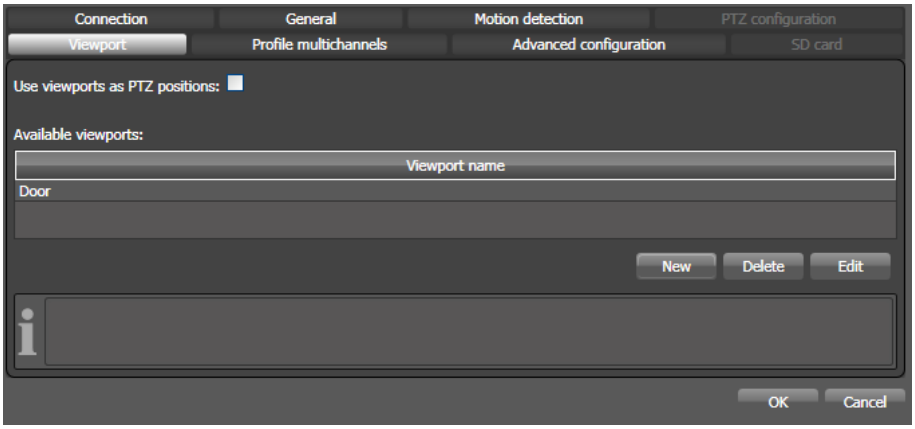
Note: PTZ schedules created here are available for all PTZ cameras.

Selecting a PTZ schedule from the list behind ‘Schedule’ will activate this schedule for this camera.

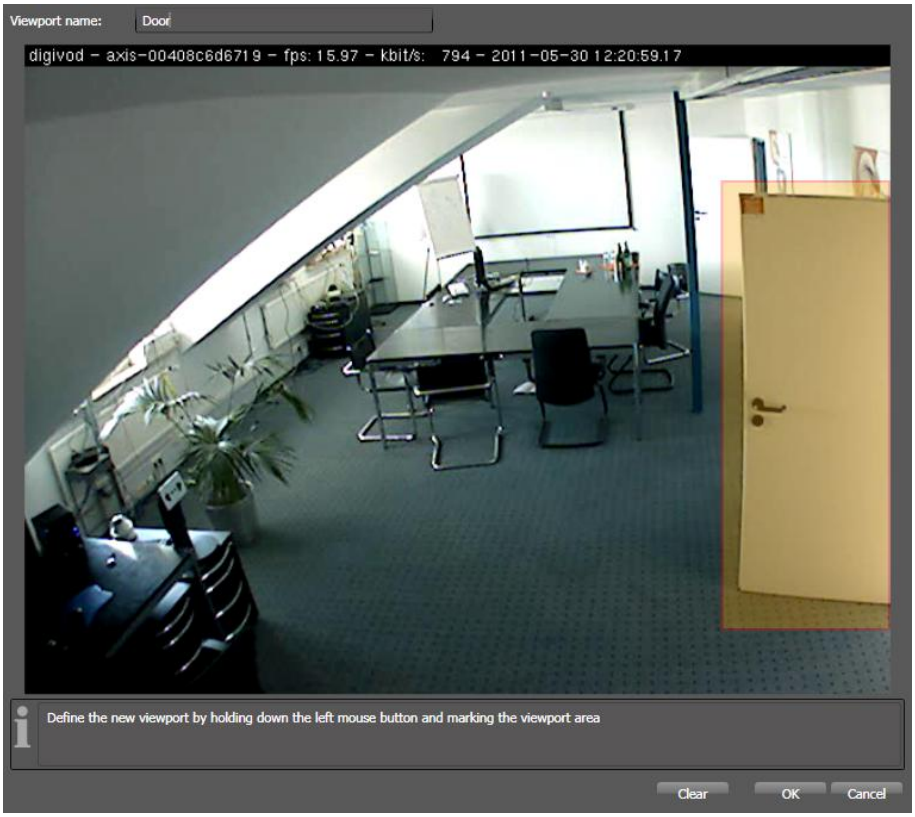
Note: At a time either a default tour or a PTZ schedule can be active.

5.1.13 Viewports

The tab ‘Viewport’ (not available for PTZ cameras) opens the definitions screen for viewport (image sections). As an option a viewport can be made available as PTZ positions too. Viewports can be used in views and in Camera tours (see Camera tours).



Create a new viewport using the New button. The following screen shows the view that has been read from the camera during the last validation (see Cameras). Use the left mouse button to pick the overlay frame on the edge or at the corner. You can scale it to any size and freely position it within the view.


Viewport name:
Door
digivod - axis-00408c6d6719 - fps: 15.97 - kbit/s: 794 - 2011-05-30 12:20:59.17
Define the new viewport by holding down the left mouse button and marking the viewport area
Clear
OK
Cancel

Enter a valid name for the new viewport in the field ‘Viewport name’. This will be the name that appears in the context menu of that camera when opening it using the right mouse button.

In this screen the Clear button deletes the rectagular area.

Important: There will be no prompt for confirmation.

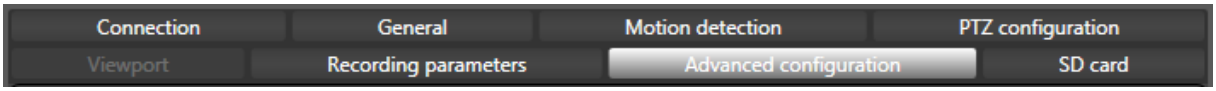
Click OK to save this viewport under the given name. Click Cancel to cancel the process.

Then you’ll see the newly defined viewport in the list of available viewports for this camera. In this screen it can be selected for editing using the Edit button and it can be deleted using the Delete button.

As an option all viewports for a single camera can be made available as PTZ positions. This allows to use them in the PTZ-position menu like if they were real PTZ-positions (see PTZ position menu).

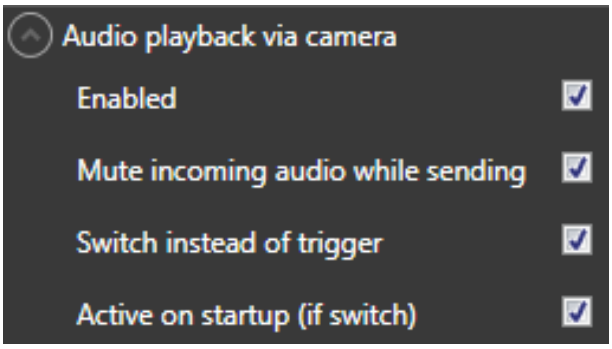
5.1.14 Advanced camera configuration

Note: Count and type of functions that can be adminstered in this tab are camera specific.



5.1.14.1 Audio output via camera (Audio upload)

Some cameras support the audio playback with built-in or connected loudspeaker. To generally activate this function, you check the box after "enabled".



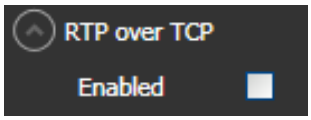
With the three checkboxes below the characteristics of the audio upload are defined.

With "Mute incoming audio while sending" the playback of the audio data on the client is interrupted for the time of speaking. The recording of the audio data will not be interrupted in this case.

By default the microphone symbol shown in the camera image in case of active audio upload can be used as a trigger, i.e. it is activated by clicking and holding the left mouse button and will become inactive when the mouse button is released. With "Switch instead of trigger" this behaviour can be changed. Then every mouse click switches the microphone permanently on or off.

If the microphone is activated as switch, it can be activated immediately when opening the camera view with "Active on startup (if switch)".

5.1.14.2 RTP over TCP



Some camera models offer the option to establish the connectionless RTP (Real-time Transport Protocol) over the connection-oriented TCP (Trans-mission Control Protocol).

Lost data packets are retransmitted when connected via TCP. For this, the TCP but has a larger internal overhead.

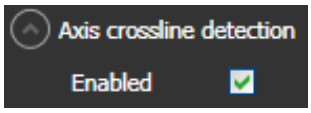
Note: It is recommended to activate this option if the camera connection goes via WAN (internet). This option usually does not fix connections problems and data loss inside a LAN.

5.1.14.3 Axis crossline detection

Note: This functions requires a corresponding digivod® license as well as the corresponding plugin to be installaed on the camera.

If this checkbox is enabled a proper setup Axis crossline detection will generate corresponding digivod® events.

Note: You need to create and activate an alarm rule for the event type ‘Motion analysis’ to generate alarms from the events that are coming from the Axis crossline detection (see Rules).



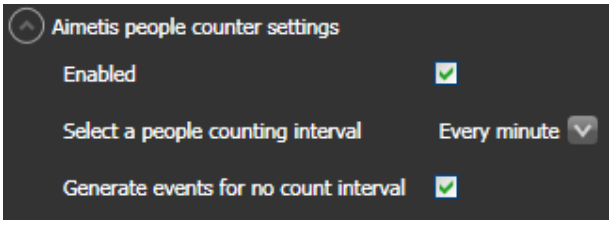
5.1.14.4 Aimetis people counter

Note: This functions requires a corresponding digivod® license as well as the corresponding plugin to be installaed on the camera.

If this checkbox is enabled digivod® will periodically retrieve the counting results from the Aimetis people counter. The cycle interval can be defined via the selection list below.

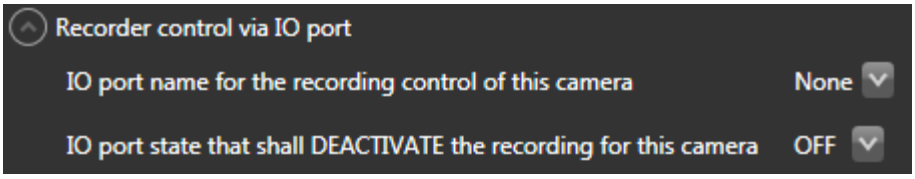
Activate ‘Generate events for non count interval’ if you also want to generate a people counting event for zero counting intervals.

Note: You need to create and activate an alarm rule for the event type ‘People counter’ to generate alarms from the events that are coming from the Aimetis people counter (see Rules).



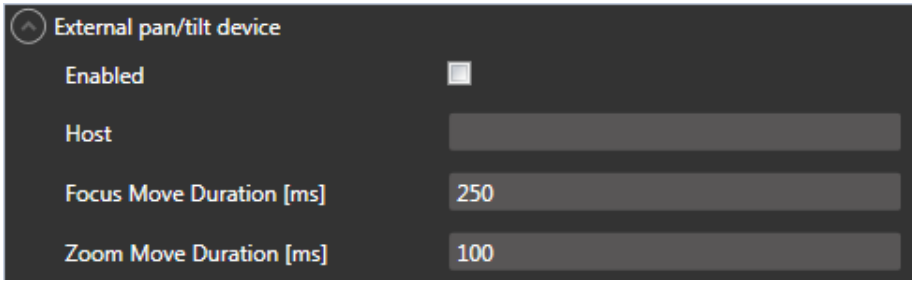
5.1.14.5 Recorder control via IO port

This option allows to start and stop the recording of the selected camera depending on the status of an IO port (see IO ports).

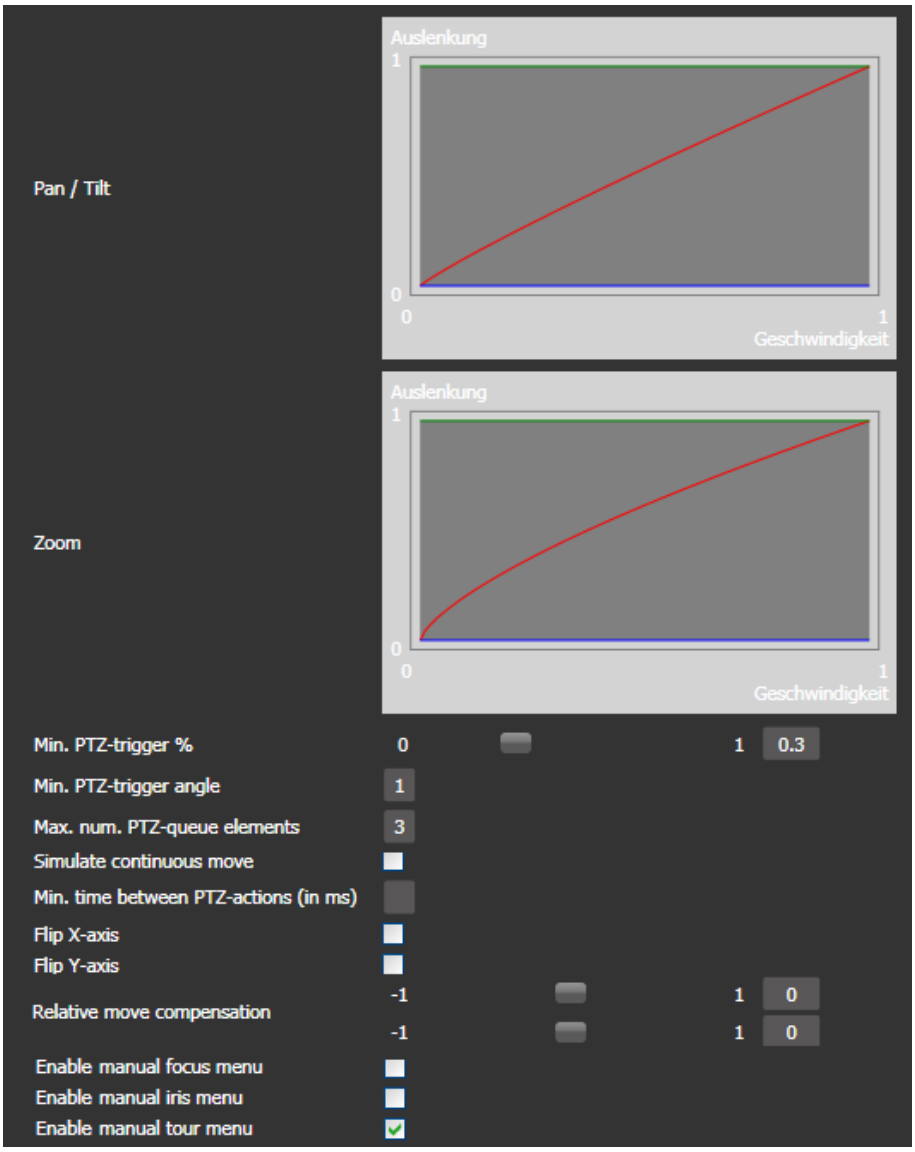

Recorder control via IO port
IO port name for the recording control of this camera
None
IO port state that shall DEACTIVATE the recording for this camera
OFF

5.1.14.6 Externes pan/tilt device

For cameras that are mounted on an external pan/tilt device the combination between camera and IP address of this device can be defined in this menu. In addition this menu allows to define the length of a single focus-step respectively zoom-step of the stepper motors in this device.



5.1.14.7 Advanced PTZ properties



Pan / Tilt
Zoom

Further details how to use these parameter curves can be found in the chapter PTZ position menu

These parameters are valid for this camera and for all users on all clients. Setting parameters within the PTZ position menu will be valid only for the current user on the current client (see PTZ position menu).

Min. PTZ-trigger %

The percentage (0 to 1) to change the current position of the PTZ-joystick in the same direction to ensure the triggering of a new PTZ-action.

Min. PTZ-trigger angle

The angle (in degrees) to change the current position of the PTZ-joystick in another direction to ensure the triggering of a new PTZ-action.

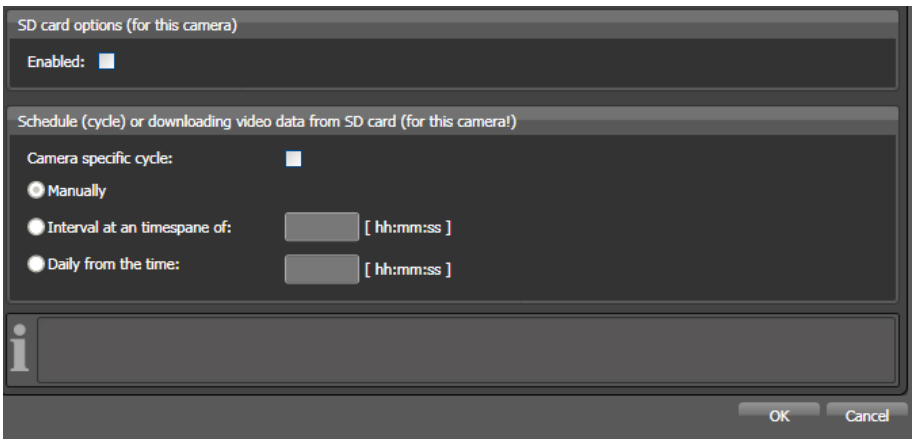
Max. num. PTZ-queue elements	If the number of pending PTZ-actions is greater than the number specified here, the exceeding PTZ-actions will be discarded.
Simulation Continuous Move	Enable this option if you want to use Continuous Move on cameras that do not support continuous move. Note: This continuous move simulation requires to send permanent PTZ-actions. This may cause PTZ-problems on various cameras.
Min. time between PTZ-actions (in ms)	Minimum time interval between two PTZ-actions (in milliseconds). **Note:** PTZ-actions that have been generated faster will be discarded.
Flip X-axis	Flips the directions of the X-axis control (joystick or joystick simulation)
Flip Y-axis	Flips the directions of the Y-axis control (joystick or joystick simulation)
Relative move compensation	Regulates the distance to move at a relative movement up or down (Y) resp. left or right (X)
Enable manual focus menu	If this checkbox is activated the manual focus menu will be displayed in the PTZ position menu (see PTZ position menu).
Enable manual iris menu	If this checkbox is activated the manual iris menu will be displayed in the PTZ position menu (see PTZ position menu).
Enable manual tour menu	If this checkbox is activated the buttons to start and pause a PTZ tour will be displayed in the PTZ position menu (see PTZ position menu).

5.1.15 SD card recording (camera settings)

Note: This functions requires a corresponding digivod® license as well as a properly configured SD-card recording on the camera.

SD card recording allows the cyclical download of video data that has been recorded on a SD card in the camera. Downloaded video data will be added into the digivod® video archive.

In the SD card tab you can switch SD card recording on and off. Also the camera specific download cycle can be defined in this tab (see SD card recording (general settings)).



Note: The chronological ordering of downloaded video data into the digivod® video archive is based on camera date and timestamp. For this it is a must to synchronize camera date and time with the digivod® server (see NTP configuration).

Note: Already existing video data will never be overwritten by video data that has been downloaded from SD cards.

By default the activation of SD card recording will deactivate the direct recording of this camera by assigning the schedule 'No recording' (see Schedules for recording parameters). When deactivating SD card recording you have to assign the required schedule manually again (see Recording parameters).

During periods in which direct recording and SD card recording are activated simultaneously, SD card video data will only be downloaded and archived if there is no archived recordings.

Important: Only complete video files will be taken to be archived. That means if a gap in the archive is shorter than the length of a video file the downloaded video file will no be added to the archive.

5.2 Views

Selecting the menu option

will open views (multiple views) administration, enabling you to create, delete and parameterize individual views.

Specifically, views are predefined displays of several camera images, viewport (see Viewports) and siteplans (see Siteplans) combined into one full view.

The summary table lists all views created in the system, the first column displaying the view name and the second column showing which group has been assigned to this particular view (see Groups).

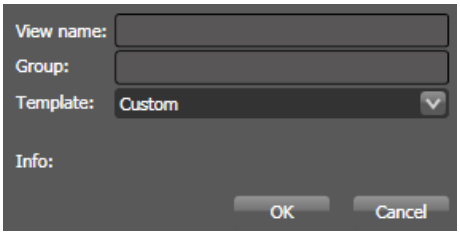
Note: It is possible to create a view with empty windows. This will allow the user to fill the window on demand when using the view for live and archive viewing. Details can be found in chapter Show view.

5.2.1 New view

Create new views by pressing the

button. Views can either be freely defined, or be based on predefined templates (samples).

For easier orentiation within the navigation tree views are shown with a customized icon that is based on the real layout of the view.



In any case you will first have to name your new view to be created. Optionally, you may also assign this view to a particular group using the field ‘Group’ (see Groups).

Creating a New View without a Template

If you wish to freely create a particular multiple view, simply select ‘Custom’ from the ‘Individual layout’ selection box and confirm by entering OK.

A new dialog box will open. In the left part, you will see the objects in the form of the navigation tree that can be inserted into a view (see Navigation tree). On the right, you will see an empty work space in which the new view can be created.

You can now import specific cameras or siteplans into your empty view by double-clicking on them.

We recommend adjusting camera arrangement and size only after having imported all your desired cameras and siteplans. You may embed the same camera or siteplan several times into one single view.

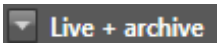
Note: With System state also the current system status can be inserted as an element into a view. In the inserted box you can select with Default tab: Summary which tab of the system status is to be shown by default when opening the view.

Delete a camera or a siteplan from view by hitting ‘Del’ after having highlighted it with a mouse-click, or by left-clicking the ✕ in the upper right-hand corner of the window.

In order to move a camera within a particular view simply highlight its window title and then drag & drop the camera to your desired position. During the dragging process you will notice positioning aids popping up on the window. Move your mouse across them to display a preview to the specific layout you will get if you were to drop the camera you are currently dragging onto this particular positioning aid.

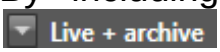
With a single left click on respectively you can activate and deactivate the auto-cropping function for each single camera. Auto-cropping will prevent black borders in live views.

Note: Auto-cropping has no impact on the archived video data. Archive access will always show the full video from a camera.

With 

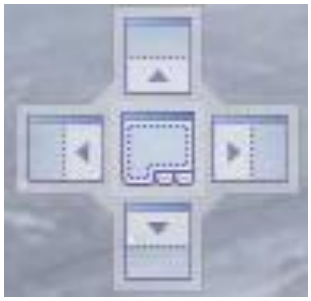
or

in the single camera windows you can determine for this camera whether it will show a permanent live image in this view or whether it will show the respective archive data in case of jumps in the archive.

By including the same camera twice in one view and selecting 

for the first and

for the second one, it is possible to always keep an eye on the current live image of the camera while doing archive research or working on an alert.



One special feature of digivod® comprises a positioning aid cross which will be displayed when moving your camera to be displaced to another camera Display area. When dropping your camera onto the center of the cross, both camera images will be superimposed, and you may select them using various tabs.

In order to remove a camera from a register structure, do not attempt to drag it by its window title (this action is reserved for the entire register structure) but rather by its camera register.

By default, whenever you import a camera into a particular view it will be displayed in full image mode. If viewports have been defined for a camera (see Viewports), you may opt to select these - instead of the camera's full image – by using the drop-down menu for this camera (right mouse button). The drop-down menu will also enable you to define additional image details as described in chapter Viewports.

Creating a new view based on a template

During digivod® setup, several frequently used views will be installed as templates. These will be displayed in the window below the camera tree; you can select them to create a new view. Additionally, every view you have created, either based on a template or freely defined, may be saved as a template.

To create a new view based on an existing template please select your desired template from the 'Template' field shortlist, and confirm your entries by hitting OK.

A new window will be opened. On the left-hand side of your page you will find all the cameras recognized by the system, whereas the right side will contain an empty workspace based on your template definition.

Now you can drag & drop individual cameras into blank fields of the empty view. You may embed the same camera several times into one single view. Just like when creating a new view without a template, you may also change the layout view or add more cameras. When you are finished, be sure to save your new view by hitting OK.

Optionally, you may also save this new view as a template by clicking Save as template.

5.2.2 Delete view

Use the Delete button to delete a particular view selected in the summary table from your digivod® system. Click OK to irrevocably delete this view. Click Cancel to cancel this process.

5.2.3 Edit view

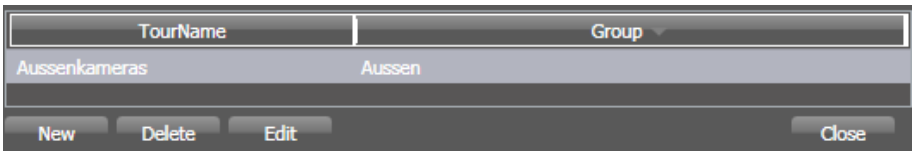
Using the Edit button you can alter an existing view as described under New View / Creating a new view without a template.

5.3 Camera tours

Selecting the menu option

will open Camera tours administration, enabling you to create, delete and parameterize individual Camera tours.

Specifically, Camera tours are predefined sequential representations of camera images and/or views.

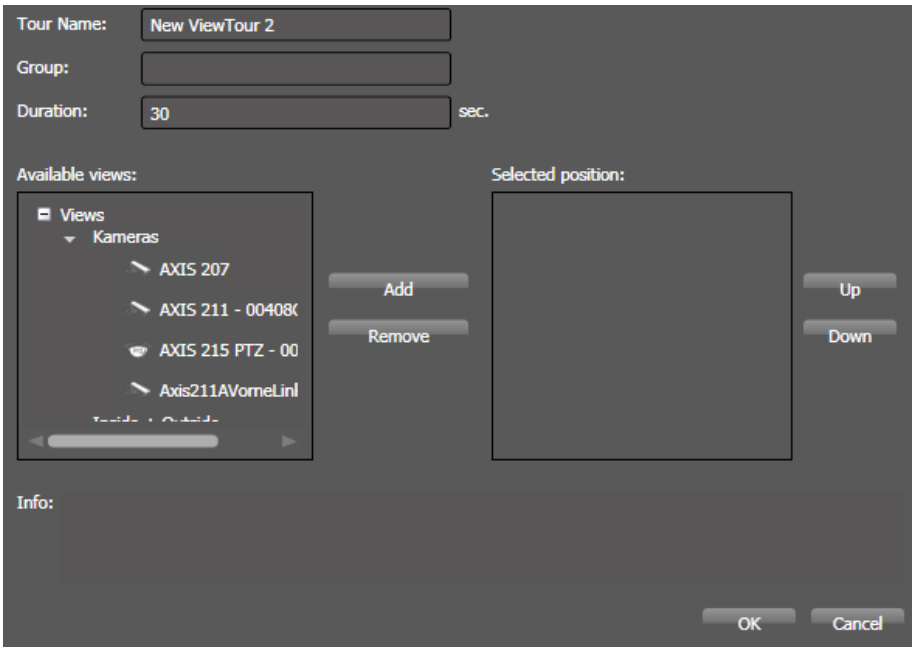


The summary table displays a list of all Camera tours created in the system. The first column lists the name of the tour, whereas the second column shows which group this view has been assigned to (see Groups).

5.3.1 New camera tour

Create a New camera tour using the

button. You will find all existing cameras and views on the left-hand side of your next window.



Enter to the name you want this tour to be saved as into the field ‘Tour name’. Subsequently, your tour will be displayed in the navigation tree under this name (see Navigation tree).

Optionally, in the ‘Group’ field you may also assign the camera tour to a specific group (see Groups).

Enter the time (in seconds) you want every single camera or view to be displayed into the field ‘Duration’.

Pressing the buttons Add and Remove will import a camera or view previously selected by a single left-click of your mouse into this tour, or likewise remove it again. You may import cameras and views several times to one single camera tour.

Furthermore, you can change the sequence of your cameras and views imported into this tour by using the buttons Up and Down and sorting the previously selected entry into a higher (up) or lower (down) position by a single left-click.

5.3.2 Delete camera tour

Using the Delete button, you can delete a camera tour previously selected in your summary list from the digivod® system. You will be prompted for confirmation. Click OK to irrevocably delete the camera tour. Click Cancel to cancel this process.

5.3.3 Edit camera tour

Using the Edit button you can change the abovementioned settings of a particular camera tour previously selected.

5.4 Groups

Optionally you may assign cameras, views and Camera tours to a group; you may choose this group name freely. The group will be created automatically when assigning a name and therefore does not have to be created separately.

Cameras, views and tours which have been assigned group names will be summarized in the navigation tree under their corresponding group names (see Navigation tree).

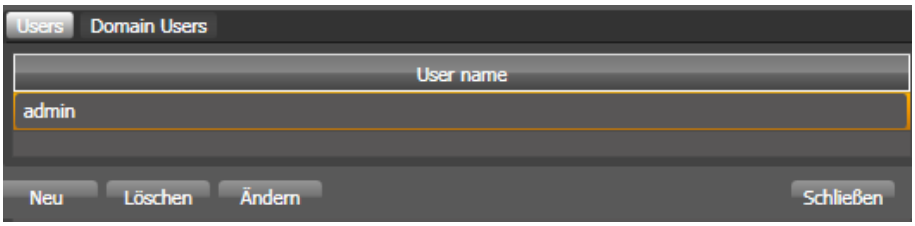
Especially in case of larger installations, by grouping cameras, views and Camera tours you will be able to create a clearly arranged structure. Furthermore, you can structure groups hierarchically by using '/' in group names.

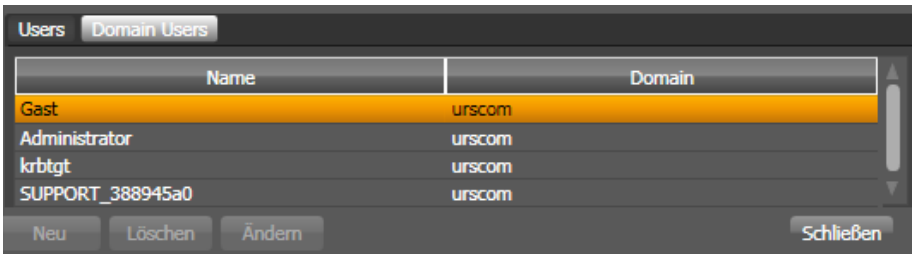
Note: External data sources may also be assigned to a group (see External sources (Multi-Location edition only)).

5.5 Users

Selecting the User menu option will open user administration.

You may even change authorizations for digivod® system users as well as for domain users.





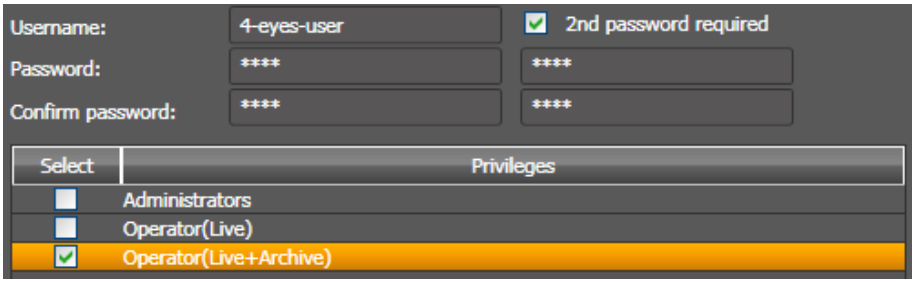
The summary table displays a list of all users created in the system, or a list of domain users.

For domain users the second column will indicate the domain.

5.5.1 New user

Start creating a new user by pressing the button New.

The following window helps you define a name, password and authorizations for this particular user. For security reasons, please enter the password for logging into the system twice.



Use the checkbox 2nd password required to activate the 4-eyes principle. This requires to enter two independent passwords to login this user.

Authorizations given to the new user to be created will be based on the total amount of privileges assigned to this user (see Privileges), please assign privileges by selecting the corresponding group line checkbox.

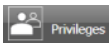
5.5.2 Delete user

Press the Delete button to delete the user previously selected in your summary list from your digivod® system. You will be prompted for confirmation. Click OK to irrevocably delete this camera. Click Cancel to cancel this process.

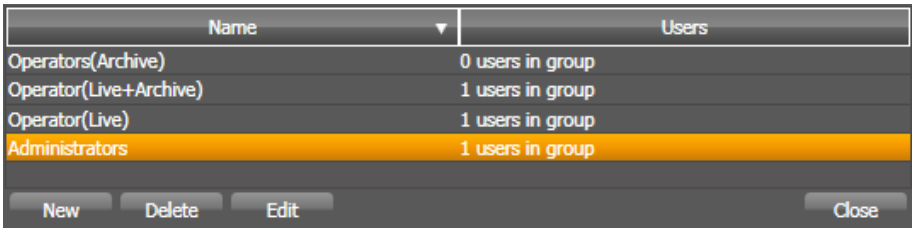
5.5.3 Edit user

Using the Edit button you may change authorizations of a previously selected user as described under New User.

5.6 Privileges (user groups)

Selecting the menu option 

will open privilege administration (synonymous with user groups), enabling you to create, delete and parameterize privileges that can be assigned to users (see Users).



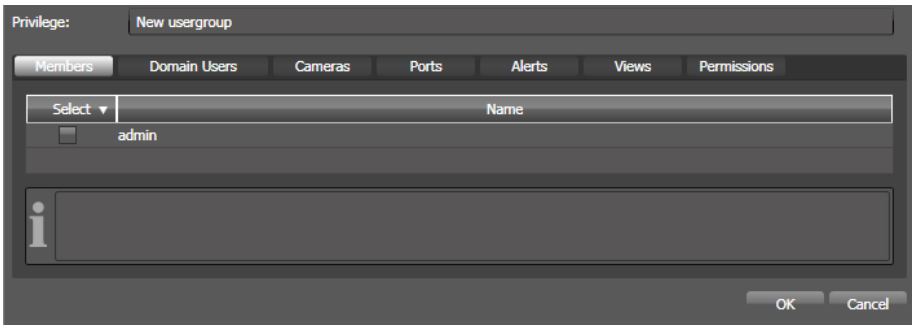
The summary table displays a list of all privileges created in the system. The first column displays the name of the privilege, whereas the second shows how many users have currently been assigned to this privilege.

5.6.1 New privilege

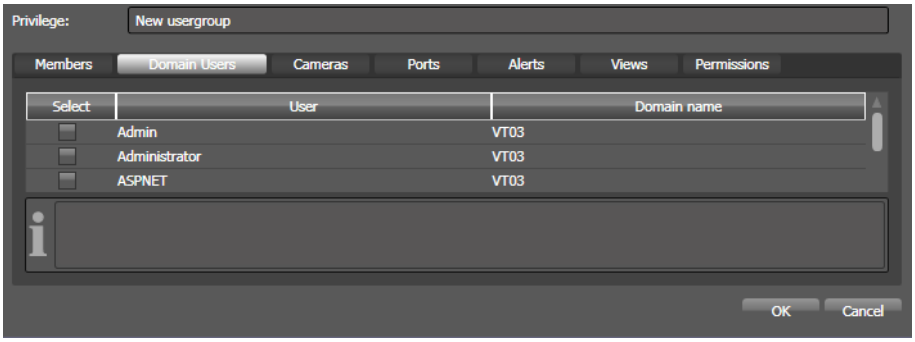
Create a new privilege by pressing the button

. Define a name for the new privilege in the field ‘Privilege’.

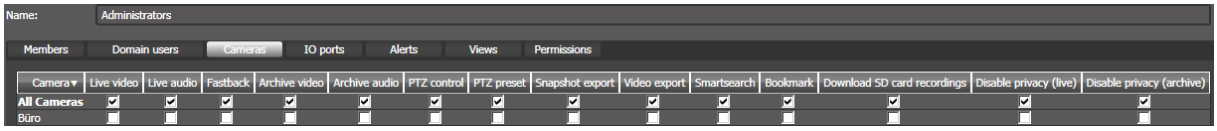
In the tab ‘Members you will find all local digivod® users, and by selecting the checkbox in front of a user name you may directly assign a specific user to your new privilege to be created.



In the tab ‘Domain Users’ you will find all Domain-User, and by selecting the checkbox in front of a user name you may directly assign a specific user to your new privilege to be created.



The tab ‘Cameras’ shows a matrix of all cameras known in the system and the assignable individual rights.

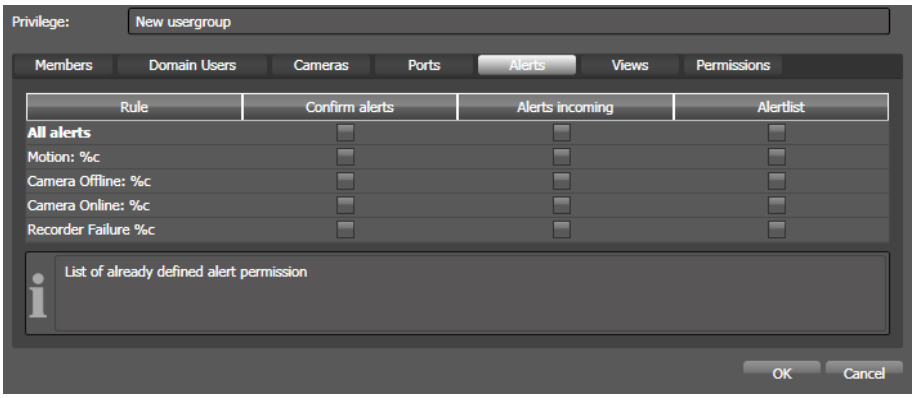


Rights that are granted in the line "All cameras" refer to all cameras whereas rights that are granted in a row of a single camera refer only to that camera. The result will be the addition of all single rights.

Live video	Live view access for this camera
Live audio	Live audio access for this camera
Fastback	Fastback access for this camera (see Fastback)
Archive video	Access to video archive for this camera
Archive audio	Access to audio archive for this camera
PTZ control	Access to free PTZ control for this camera (see PTZ control)
PTZ preset	Access to predefined PTZ positions of this camera (see PTZ position menu)
Snapshot Export	Access to snapshot export for this camera (see Snapshots)
Video Export	Access to video export functions for this camera (see Video Export)
SmartSearch	Access to SmartSearch function for this camera (only if corresponding license is available) (see SmartSearch)
Bookmark	Access to bookmark function to create manual bookmarks in the video archive of this camera (see Bookmarks)
Download SD card recordings	Access to manual download function for SD card recordings of this camera (see System state display)

Disable privacy (live)	Privacy zones and Privacy protection areas will not be active for this user in live views (see New camera (manual) and Privacy Protection)
Disable privacy (archive)	Privacy zones and Privacy protection areas will not be active for this user in archive views (see New camera (manual) and Privacy Protection)

The tab ‘Alerts’ shows a matrix with all known rules in the system and the assignable individual rights for processing and viewing within the alert management.

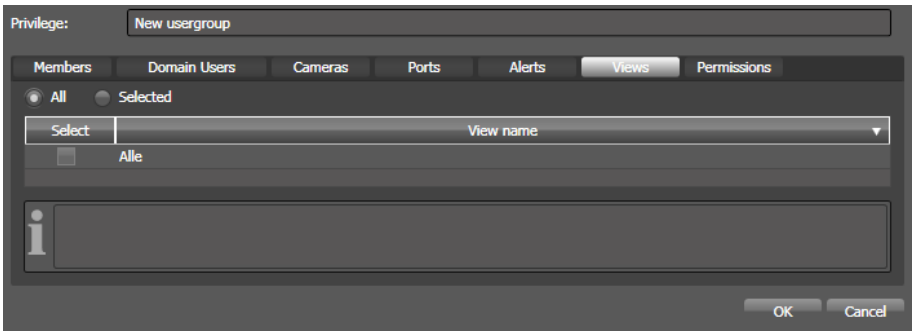


Rights that are granted in the line "All alerts" refer to all alert rules whereas rights that are granted in a row of a single alert rule refer only to that rule. The result will be the addition of all single rights.

Confirm alerts	User can confirm alerts that have been triggered by this rule (if confirmation is required)
Alerts incoming	User can see alerts that have been triggered by this rule in the list of incoming alerts
Alertlist	User can see alerts that have been triggered by this rule in the alertlist

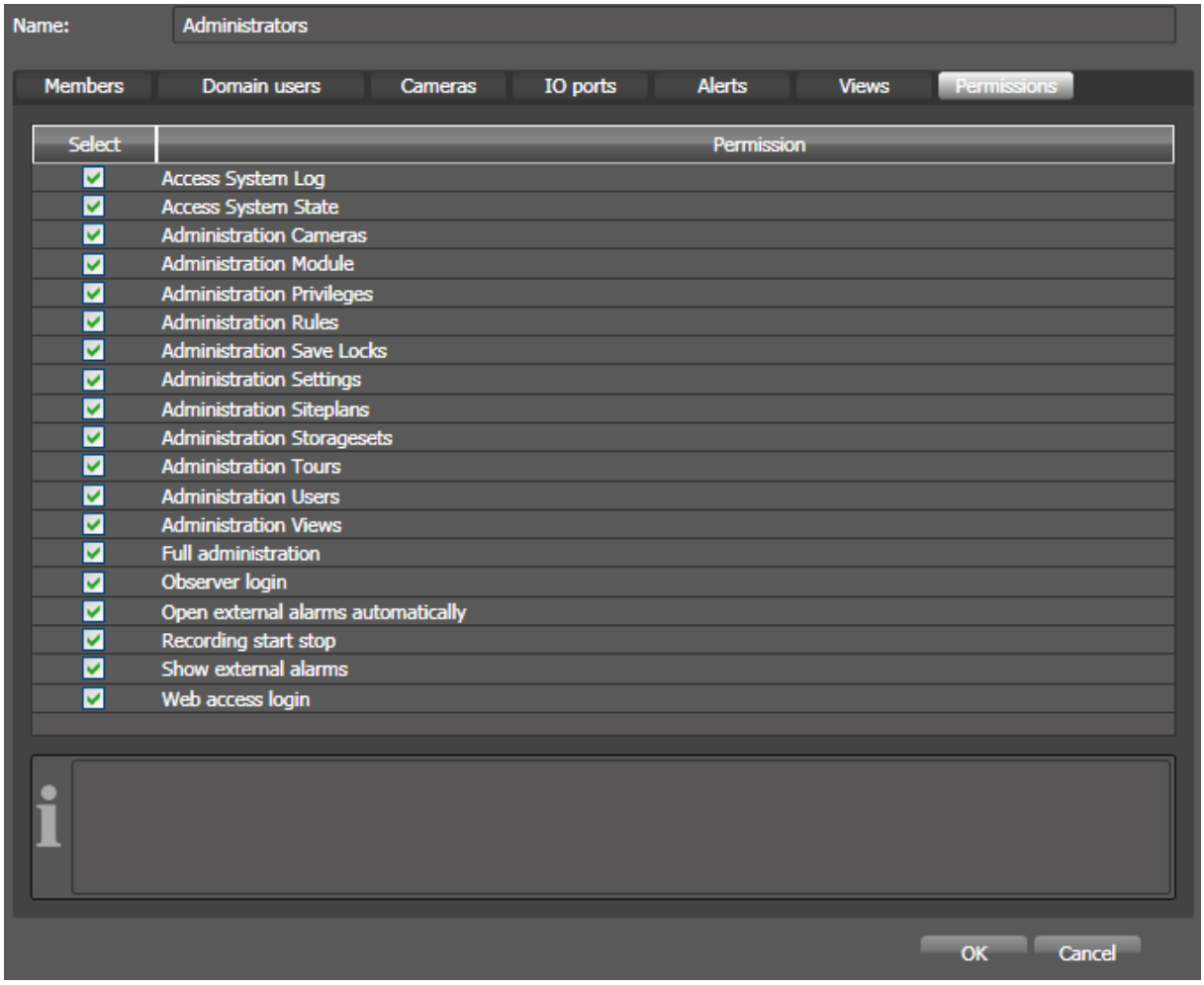
Note: Also if a user doesn't have the permission to see an alert in the list of incoming alerts or in the alertlist this alert will be saved in these lists referring to the settings for this rule (see Rules).

The tab 'Views' shows all views known in the system. Choosing the option 'All' will select all views, while 'Selected' will select particular views by selecting the checkbox in front of a view name, thus assigning it directly to your privilege currently being edited.



Note: Access to the cameras contained the the granted views is only possible, if also the access right to these cameras has been granted to the user!

The tab ‘Permissions’ defines all permissions that can be granted. By selecting the check box in front of a permission you can assign it to the privilege currently being edited.



Access System Log	User can access system Log display (see System Log Display) from the main menu.
Access System State	User can access system state display (see System State Display) from the main menu.
Administration Cameras	User can create, modify and delete cameras.
Administration Modules	User can access the menu to administer optional modules. **Note:** Which optional modules can be managed in this menu depends on the license.
Administration Privileges	User can create, modify and delete privileges. **Note:** This permission includes the right to grant and revoke privileges to other users.
Administration Rules	User can create, modify and delete rules.

Administration Savelocks	User can create, modify and delete savelocks. **Note:** This permission includes the deletion and modification of savelocks that have been created when setting bookmarks (see Bookmarks).
Administration Settings	User can access the settings administration.
Administration Siteplans	User can create, modify and delete siteplans.
Administration Storagesets	User can create, modify and delete storagesets.
Administration Tours	User can create, modify and delete camea tours.
Administration Users	User can create, modify and delete users.
Administration Views	User can create, modify and delete views.
Full Administration	User has full administration permission. **Note:** This permission includes all above described administration permissions.
Observer login	User can login to the system.
Open external alarms automatically	(multi location server users only) Alarms that automatically open a view on an external system will also open this view on the multi location server for users that own this permission. (see External sources (Multi-Location edition only))
Recording Start Stop	User can access the Start Stop buttons in the system state display (see System State Display). **Note:** This permission requires 'Access system state' as well.
Show external alarms	(multi location server users only) User can see alarms from external systems (see External sources (Multi-Location edition only))
Web access	User can login to the system via web access (see digivod® web access)

5.6.2 Delete privilege

Press the Delete button to delete the privilege previously selected in your summary list from the digivod® system. You will be prompted for confirmation. Click OK to irrevocably delete this privilege. Click Cancel to cancel this process

5.6.3 Edit privilege

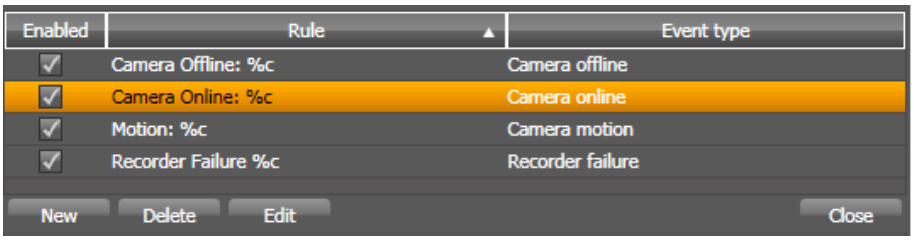
Using the Edit button you can change data for an existing privilege as described under New privilege.

5.7 Rules

Selecting the menu option

will open rules administration, enabling you to create, delete and edit individual rules.

Rules specify which events occuring in your digivod® system will be interpreted as alerts, and also, how you want digivod® to react to these alerts.

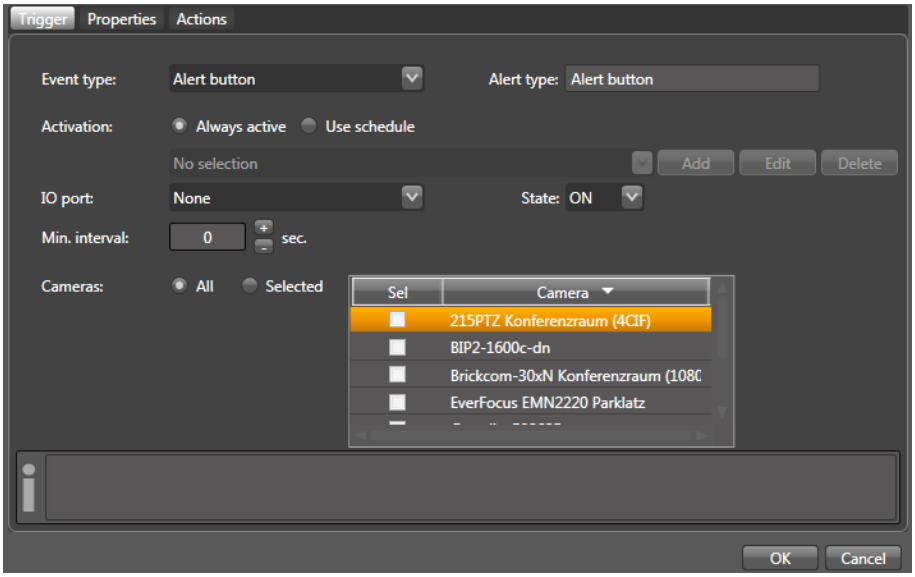


The summary table displays a list of all the rules created in the system. The check box of the first column indicates whether this rule has been enabled or disabled. The second column lists the rule's name, whereas the third column displays the digivod® event this rule will be applied to.

5.7.1 New rule

Create a New rule by pressing the

button. The next window displays details about the triggering event and the validity of this rule within the 'Trigger' tab.



Select the type of event you want this rule to apply to in the selection box ‘Event type’. You can choose from the following system events:

Note: Depending on your specific system configuration and your license, not all event types listed here might be available.

Alarm button: Event which will be triggered if an alert key connected to the system has been actuated.

Audio alarm: Event which will be triggered if the camera’s internal audio recognition has detected an acoustic signal.

Bookmark: Event which will be triggered if a bookmark is set (see Bookmarks).

Camera offline: Event which will be triggered if the camera cannot be accessed over the network any longer.

Camera online: Event which will be triggered if a camera, which had previously been offline, can now be accessed again over the network.

Camera tampering: Event type ‘Camera manipulation’, e.g. when changing camera orientation

Custom: for special applications; please contact your digivod® Support Service.

Destination change: (for special applications in the Public Transport sector) Will be triggered if the destination has been changed.

External device offline: Event which will be triggered if an IO device is offline (see External devices)

External device online: Event which will be triggered if an IO device is online again (see External devices)

External event: External event that has been imported via the optional function CSV import (see CSV import)

External recorder offline: Event which will be triggered if an external recorder in a multi recording environment is offline (see Instructions for multi recording installation).

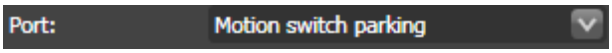
External recorder online: Event which will be triggered if an external recorder in a multi recording environment is online again (see Instructions for multi recording installation).

External source offline: Event which will be triggered if the connection to an external video source (see External sources (Multi-Location edition only)) has been interrupted.

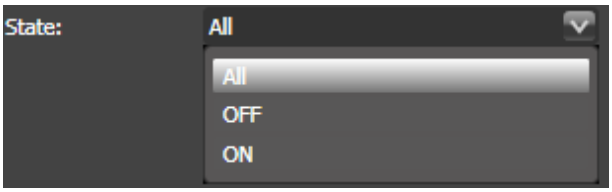
External source online: Event which will be triggered if the connection to an external video source (see External sources (Multi-Location edition only)) has been set up again.

IO port: Event which will be triggered if an IO port reports a status change.

The selection of the port defines the port this rule is to respond to.



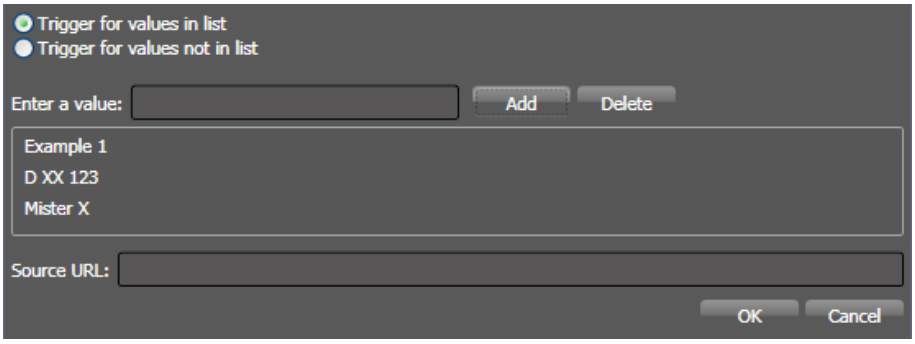
In the field behind ‘State‘ you can define on which port status this rule is to respond to. The selection offers the identifier like they have been defined in the IO port settings (see IO ports).



License plate: Event type ‘License Plate Recognition’ (useful only if this module is installed and active).

Use the Change button to define a blacklist or or a whitelist for this event. Values cannot be entered in the field behind ‘Values’. This output field only shows the first values from the list.

The content of the list can be maintained in the dialog that will be opened using the Change button.



Enter a new value and press Add to add it to the list. Select a value from the list and press Delete to remove it from the list.

Use the radio buttons ‘Trigger for values in list’ and ‘Trigger for values not in list’ to define, whether the list is a blacklist or a whitelist.

In the field behind ‚Source URL' you can enter a URL of a dynamic list with values for blacklist and whitelist. Please contact your digivod® support for further details.

Motion detection: Event which will be triggered if a motion detector recognizes a movement (see Video sensor (Motion detection) and New camera).

The selection of the Motion detection window defines, whether this rule is to respond to all or only to a single Motion detection window. The list allows to select one of the first four Motion detection windows that have been defined on the camera.

People counter: Event which will be triggered if the 'People Counting' module reports a people counting event (useful only if this digivod® module has been installed and enabled).

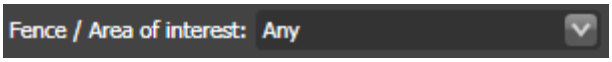
Recorder failure: Event which will be triggered if the digivod® recorder either cannot write videodata into the archive or if the connection to at least one camera is unstable or not available. (this makes it different compared to 'camera offline' event).

Serial port: for special applications; please contact your digivod® Support Service.

Stop: (for special applications in public transports) Will be triggered when a bus or train stops.

Video content analysis (VCA): Event which will be triggered by the optional serverbased videoanalyses (see Server-based videoanalysis) or by Axis crossline detection (see Axis crossline detection).

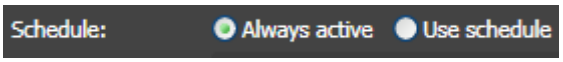
For events that were generated by the serverbased videoanalysis the selection of a fence or an area of interest defines, whether this rule is to respond to all or only to one of the fences / areas of interest.



Video loss: Event which will be triggered by Axis videoservers if the signal of an analogous camera has been lost.

The ‘Alert type’ is a free text field to enter a user defined alert description. The default value is the eventtype. The ‘Alert type’ can be used for selections within the alertlist (see Alertlist). By using the same alert type for different rules or events application specific groups of alerts can be generated. It may be, for example, all types of movement events (Analysis, Motion detection) together under one Alert type.

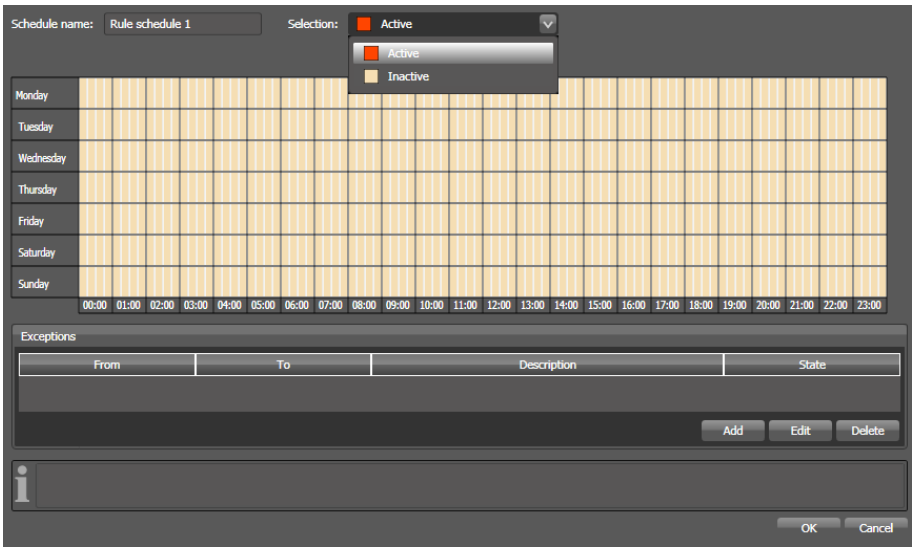
Behind ‘Schedule’ you can define, at what times a rule shall be active.



Either a rule is always active or its activity is controlled by a schedule. Press

to create a schedule.

The following dialog is corresponding to the schedule creation for camera settings (see Schedules for recording parameters). The only difference is the content of the list behind ‘Selection’. This list will only show the two statuses a rule can have.



Using the field

you can specify how many seconds will have to pass before this rule can be triggered again at the earliest. The defaulted ‘0’ value ensures that all events complying with this rule will be rated as alerts. For specific cases this might lead to undesirable ‘alert showers’ which, however, may be prevented using a value other than 0.

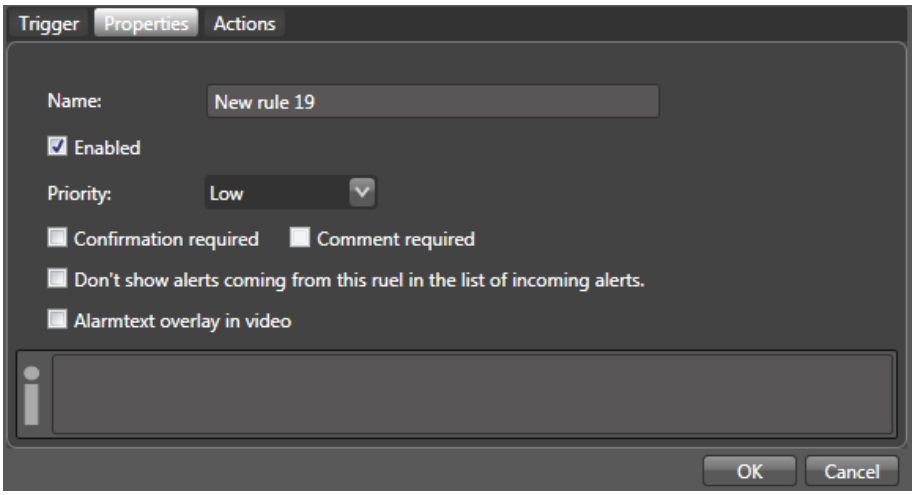
Note: When using a value other than 0, some alerts might be lost, i. e. events complying with this rule might possibly not trigger an alert within the defined time interval.

In the fields

you will determine whether this rule is to be active or inactive, depending on the status of an IO port (see IO ports). With this you can realise e. g. activation / deactivation or gatekeeper / security center switch-over. Is the activation of a rule controlled via a virtual IO port, two events can be logically combined using this function in order to trigger an alert (see IO ports).

Below ‘Cameras’ all cameras known by the system are displayed. ‘All’ will select all cameras, whereas ‘Selected’ will select individual cameras by selecting the checkbox in front of a camera name. This rule will apply only to events of selected cameras.

In the ‘Properties’ tab you can specify general data for this rule.



In the field ‘Name’ you can define a name. This name will be shown in the list of incoming alerts and in the alertlist, when the rule has made an event to be an alert (see List of incoming alerts and Alertlist).

Note: The following makros can be used within the name string get additional information about the alarm trigger:

%c name oft he triggering camera (like it is defined in the camera administration)

%t Number of the triggering window (event type camera motion and motion analysis) or number of the triggering IO port (event type camera IO)

%v Additional value that has been transmitted with the triggering event; %v equals %v1 and shows the recognized license plate with the event type license plate; %v2, %v3 and %v4 show up to three more additional details with the event type custom or external even (see CSV import).

Use the ‘Enabled’ checkbox to activate or deactivate this rule. Please note that the control mechanisms ‘Always active’ or ‘Activity-scheduled’, as described above, will only work if the checkbox ‘Activated’ has been selected.

The selection box ‘Priority’ lets you specify the priority of an event that will become an alert according to this particular rule (see List of incoming alerts and Alertlist).

‘Confirmation required’ defines whether an alert triggered by this rule requires any confirmation of the user. (see Mass confirmation of alerts)

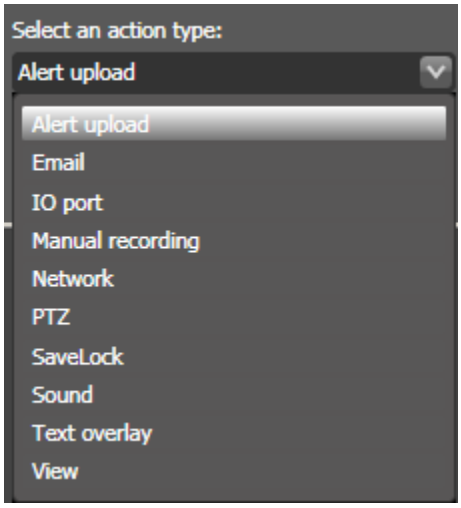
Using ‘Comment required’ (only active if ‘Confirmation required’ has been selected) you may specifiy whether an alert triggered by this rule requires the user to leave a comment.

By default, all events that are considered an alert according to a particular rule will be displayed both in the list of incoming alerts (see List of incoming alerts) and in the alert list (see Alertlist). The option ‘Ignore in incoming alerts’ lets you have events which are considered an alert according to this particular rule be displayed in the alert list only.

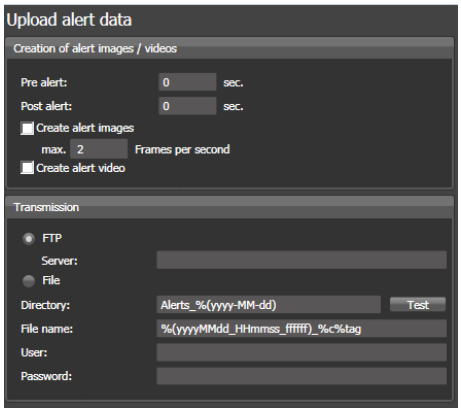
With 'Alarmtext overlay in Video' you determine whether the name of the rule is to be shown in the live image of the camera for a short time when an event occurs or not.

The ‘Actions’ tab defines actions to be taken by the digivod® system once this rule has been triggered.

Using the New button you will create a new action for this rule. You can define various actions for one single rule. You may choose from the following actions:



Alert upload



This action can automatically upload event triggering snapshots and/or video data to a remote server.

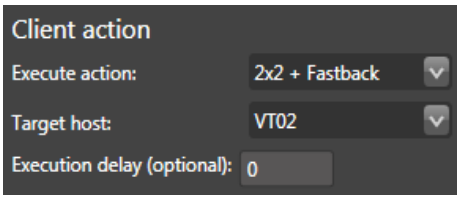
Use alert and post alert to define the period of time around the triggering event for that snapshots respectively video data shall be generated.

If ‘Create alert images’ is selected digivod® will generate single .jpg files for the upload.

If ‘Create alert video’ is selected digivod® will create a video .mp4 video file for the upload.

Under ‘Transmission” you can define the upload parameters for the remote FTP server or for a windows share. If uploading to a FTP server only the server name has to be entered. If uploading to a windows share the server name has to be entered together with the target directory. In both cases you need to enter ‘user’ and ‘password’ to access to the remote server.

Client action

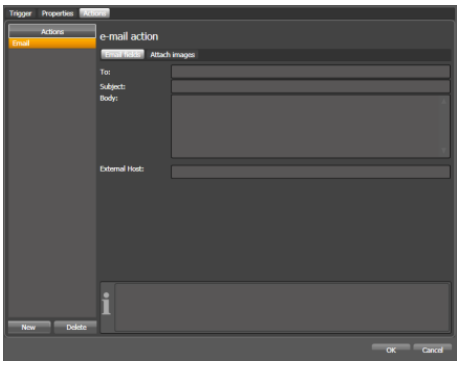


This action executes the selected multiple action (see Key configuration) on this client. Optionally this execution can be delayed.

Note: A multiple action can only be selected here, if the optional name has been set in its definition.

e-mail

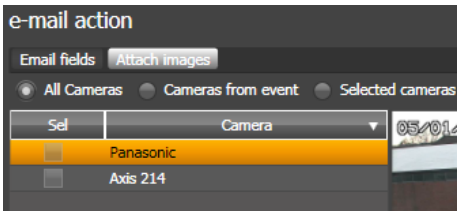
Selecting this action will send off an e-mail.



Details to be configured in the ‘e-mail fields’ tab include: entering the receiver into the field ‘To’ (please separate several receivers by commas), the subject into the field ‘Subject’, and the message into the field ‘Body’.

In order to enable your digivod® system to send e-mails you will need to enter all the required correct settings for the server and SMTP user (see e-mail settings).

The field ‘External Host’ lets you specify the name of the computer which will grant the e-mail recipient access to the digivod® archive containing the video data of this particular alert. If you enter any information in this field, all e-mails sent by the digivod® system will contain a link through which the recipient of the e-mail can jump directly into the archive of the video data triggering the event.



Additionally, you can also define in your ‘Attach images’ tab which cameras will be used for attaching images to an e-mail at the time an event occurs.

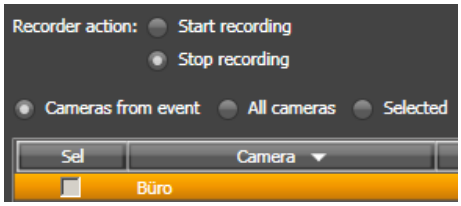
Selecting ‘All cameras’ will insert .jpg files of all cameras, whereas ‘Alert cameras’ inserts only files from the camera which triggered the event, and ‘Selected cameras’ inserts files from those cameras which have explicitly and previously been selected from the list of all cameras.

IO port

This action can switch an IO port.

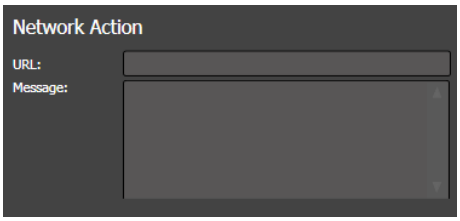
Select the port and the kind of status change from the lists.

Manual recording



This action allows to start and stop the recording.

Network

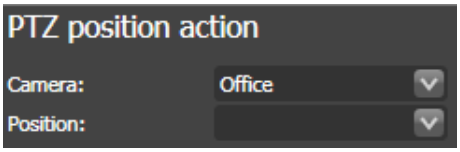


Selecting this action will send off an e-mail using http.

Enter the destination address into the ‘URL’ field.

Enter the message to the specified receiver into the field ‘Message’.

PTZ



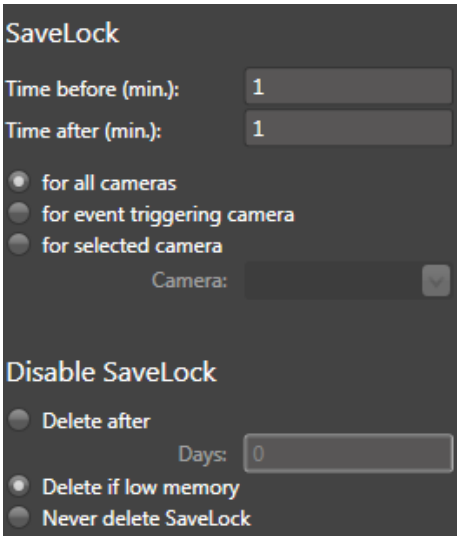
This action will move a PTZ camera into a specific position.

Select the camera and the predefined PTZ position from the lists (see PTZ configuration).

Note: Previously, all selectable PTZ positions must have been directly defined within the camera. If required, use the link to the camera start page, available in the camera overview (see Cameras), and follow the instructions of your camera manufacturer.

SaveLock

This action will set a SaveLock (see SaveLock) for video data triggering an alert, including pre-/ post-alert recordings.



Define the time (in minutes) you want the SaveLock to be enabled for your video archive before and after the event triggering the alert; do so by filling in the 'Time before (min)' and 'Time after (min)' fields.

Further below you will find a selection of camera(s) whose video data are to be locked. Select 'From all cameras' if you wish to protect the entire video archive, or specifically select the camera triggering the event, or yet another camera.

Depending on your settings selected under 'Disable Lock', the video data protected from deletion will eventually be deleted either automatically, or after a specified number of days, or upon reaching a free memory threshold defined for the Cleaner (see digivod® cleaner), or never at all.

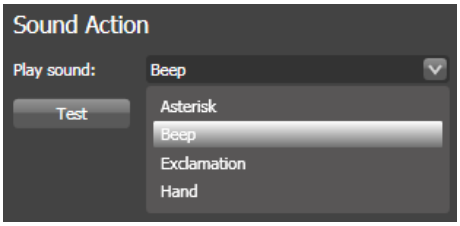
Furthermore, you may also remove a SaveLock manually (see Delete SaveLock).

Note: The option 'Never delete SaveLock' might possibly cause the memory area defined for storing your video data to overflow!

Note: Using SaveLocks and suitable cleaner parameterization, you will be able to configure digivod® in such a way as to archive alert data only (see Alert triggered archiving).

Note: By default digivod® stores video data in one minute blocks. According to length and location of a savelock, in most cases the resulting protection area will be longer than selected here.

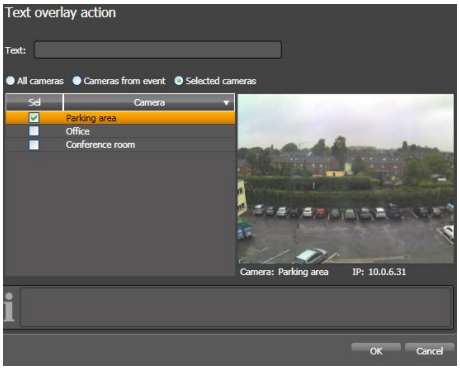
Sound



This action will start playing a sound file for active digivod® clients.

Select the sound file to be played in the 'Play sound' field. Press the 'Test' button to play this sound.

Textoverlay

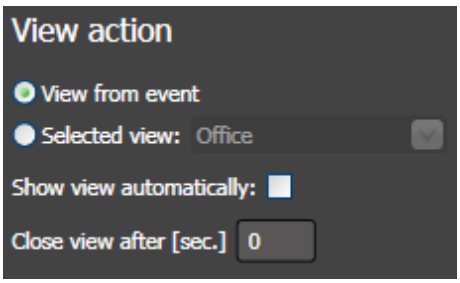


This action will display a predefined text in the top area of the selected cameras.

Note: This feature is only available for Axis cameras.

In your camera, under 'Text Overlay Settings', you will have to select the option 'Include text'; the text in the field 'Include text' has to contain the string #D.

View



Selecting this action will open a camera view, a view, a tour or a siteplan.

'View from event' opens the view of the camera triggering the event.

Choosing 'Selected View', you can now freely select your image to be opened from all cameras, views, Camera tours and siteplans. Furthermore, the check box 'Show view automatically' will define whether this image will be automatically displayed in foreground or not. If there is a value unqual 0 entered in 'Close view after (sec.)' the view will automatically be closed after this time.

5.7.2 Delete rule

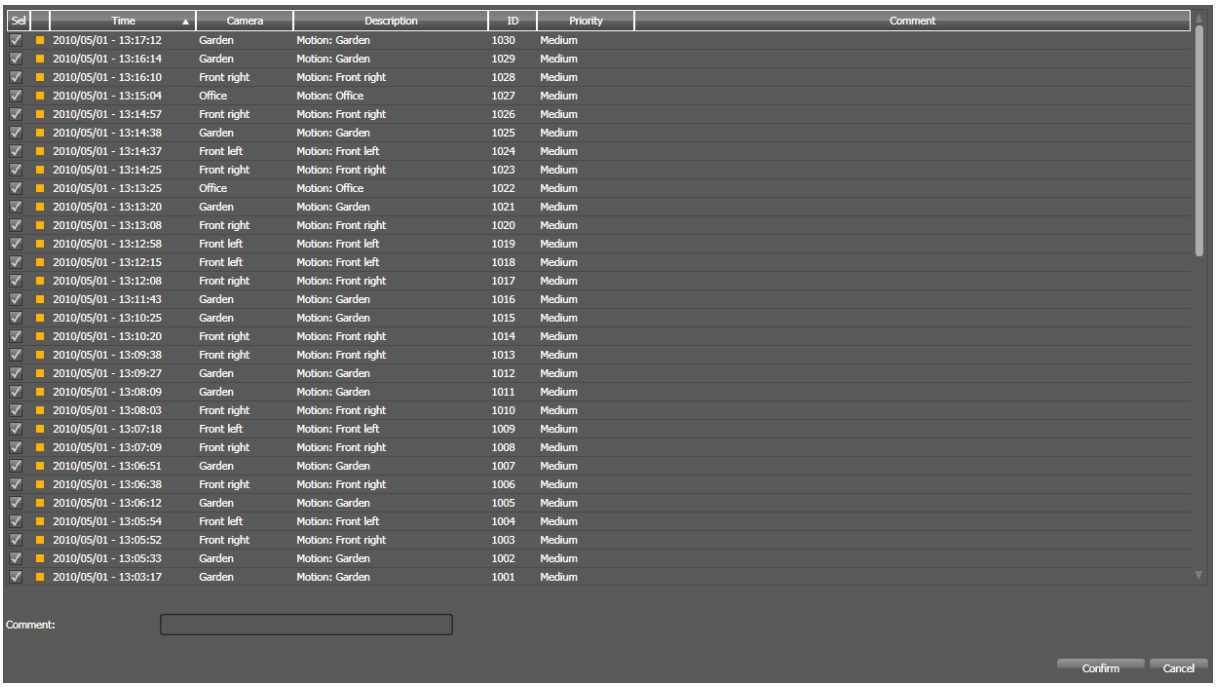
Selecting the Delete button you can delete a rule previously selected in your summary list from the digivod® system. You will be prompted for confirmation. Click OK to irrevocably delete this rule. Click Cancel to cancel this process.

5.7.3 Edit rule

Using the Edit button you can alter an existing rule as described in chapter New rule.

5.7.4 Mass confirmation of alerts

If there are unconfirmed alerts when starting the digivod® observer these will be shown in a separate mass confirmation screen. This screen allows to confirm them all in one step using the same comment. If single alert shall be confirmed, these can be selected in the column ‘Sel‘.


Sel
Time
Camera
Description
ID
Priority
Comment
2010/05/01 - 13:17:12 Garden Motion: Garden 1030 Medium
2010/05/01 - 13:16:14 Garden Motion: Garden 1029 Medium
2010/05/01 - 13:16:10 Front right Motion: Front right 1028 Medium
2010/05/01 - 13:15:04 Office Motion: Office 1027 Medium
2010/05/01 - 13:14:57 Front right Motion: Front right 1026 Medium
2010/05/01 - 13:14:38 Garden Motion: Garden 1025 Medium
2010/05/01 - 13:14:37 Front left Motion: Front left 1024 Medium
2010/05/01 - 13:14:25 Front right Motion: Front right 1023 Medium
2010/05/01 - 13:13:25 Office Motion: Office 1022 Medium
2010/05/01 - 13:13:20 Garden Motion: Garden 1021 Medium
2010/05/01 - 13:13:08 Front right Motion: Front right 1020 Medium
2010/05/01 - 13:12:58 Front left Motion: Front left 1019 Medium
2010/05/01 - 13:12:15 Front left Motion: Front left 1018 Medium
2010/05/01 - 13:12:08 Front right Motion: Front right 1017 Medium
2010/05/01 - 13:11:43 Garden Motion: Garden 1016 Medium
2010/05/01 - 13:10:25 Garden Motion: Garden 1015 Medium
2010/05/01 - 13:10:20 Front right Motion: Front right 1014 Medium
2010/05/01 - 13:09:38 Front right Motion: Front right 1013 Medium
2010/05/01 - 13:09:27 Garden Motion: Garden 1012 Medium
2010/05/01 - 13:08:09 Garden Motion: Garden 1011 Medium
2010/05/01 - 13:08:03 Front right Motion: Front right 1010 Medium
2010/05/01 - 13:07:18 Front left Motion: Front left 1009 Medium
2010/05/01 - 13:07:09 Front right Motion: Front right 1008 Medium
2010/05/01 - 13:06:51 Garden Motion: Garden 1007 Medium
2010/05/01 - 13:06:38 Front right Motion: Front right 1006 Medium
2010/05/01 - 13:06:12 Garden Motion: Garden 1005 Medium
2010/05/01 - 13:05:54 Front left Motion: Front left 1004 Medium
2010/05/01 - 13:05:52 Front right Motion: Front right 1003 Medium
2010/05/01 - 13:05:33 Garden Motion: Garden 1002 Medium
2010/05/01 - 13:03:17 Garden Motion: Garden 1001 Medium
Comment:
Confirm
Cancel

5.8 Alert triggered archiving

Should you wish to archive only those video data which have been recorded immediately before, during and after an alert, you may use the ‘Lock’ action located in the alert management, providing you with the option to remove SaveLock ‘automatically when running out of memory space’ (see New rule / ‘Lock’ action)

If all alerts are connected with this action, and provided digivod® cleaner has been configured to archive video data for a very short time only (e. g. 30 minutes), the only data remaining in the digivod® archives will be alert data.

Another possibility to set the system to alert triggered archiving is to use an event based schedule (see Schedules for recording parameters).

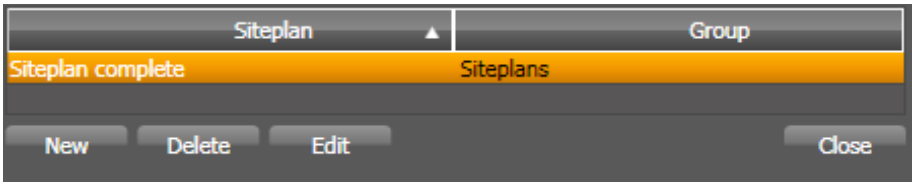
5.9 Siteplans

Selecting the menu option

will open siteplans administration, enabling you to create, delete and edit siteplans.

'Siteplans' are digital ground plans or site plans of your supervised area in which your cameras, including their positions and view directions, have been entered.

As an alternative to your navigation tree (see Navigation tree), siteplans will enable you to directly open specific cameras (see Using siteplans).



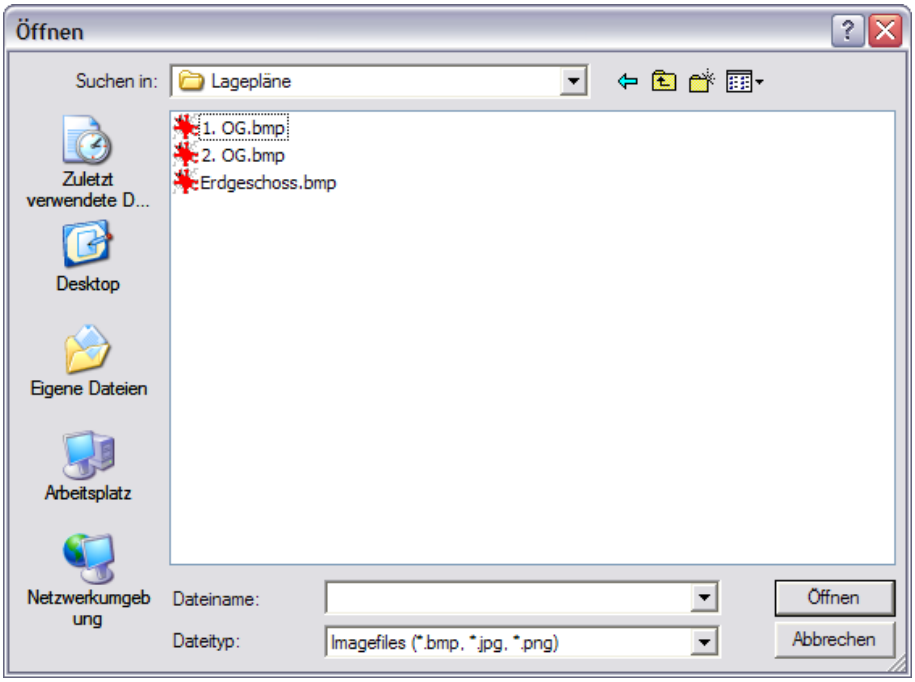
The summary table displays a list of all siteplans created in the system.

5.9.1 New siteplan

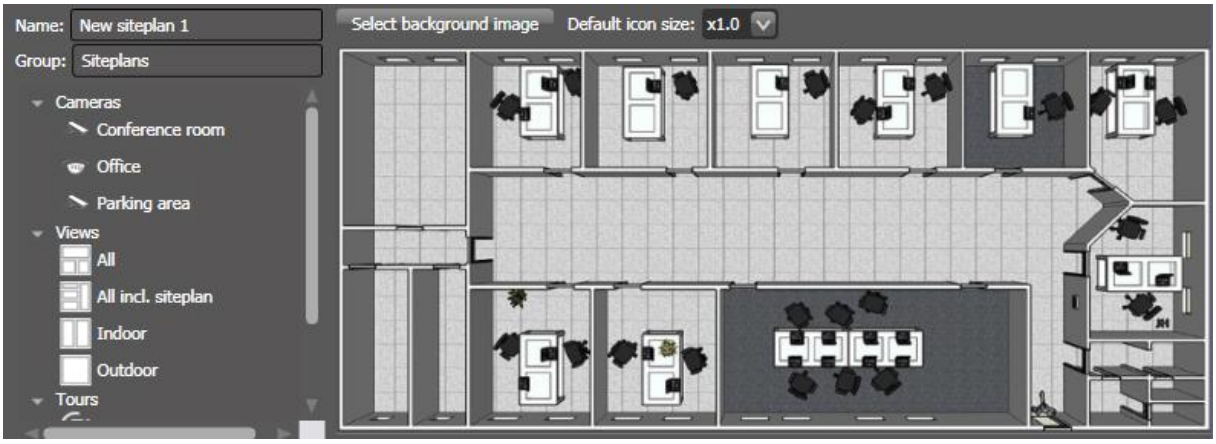
Create a New siteplan by pressing the

button. The next window displays the current navigation tree and shows the objects (IO-ports, cameras, views and other siteplans) that can be integrated into a siteplan.

First define a name for the new sitplan and then use Select background image to select the file that contains the siteplan image from the filesystem. Filetypes .bmp, .jpg and .png are supported.



After having confirmed your selection by hitting Öffnen, the selected siteplan will appear to the right-hand side of the window for your New siteplan.



Use double left click on an navigation tree object (cameras, views and other siteplans) to insert these into the New siteplan. New inserted objects will be positioned in the top left corner. From there they can be freely positioned within the siteplan using drag & drop.

Delete a camera previously highlighted by a single left-click on the siteplan by pressing the ‘Del’ key.

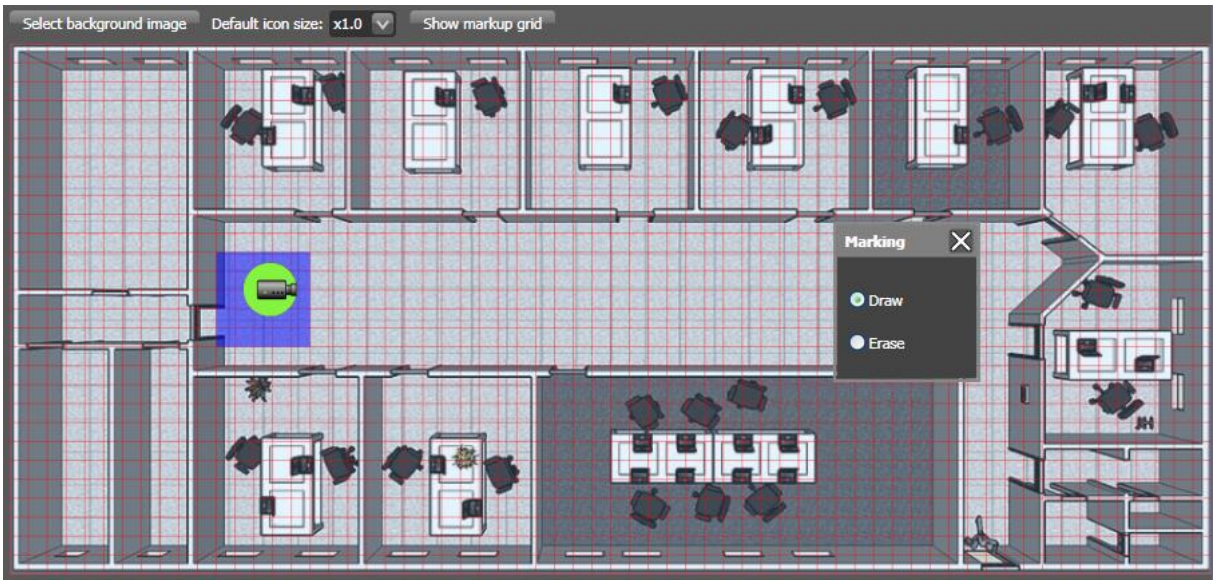
The factor choosen in the field x1.0 defines the standard size for all integrated objects.

Right-click on a camera opens a window that allows to vary the cameras direction and the size of the icon.

Use Remove to delete this object from the siteplan.

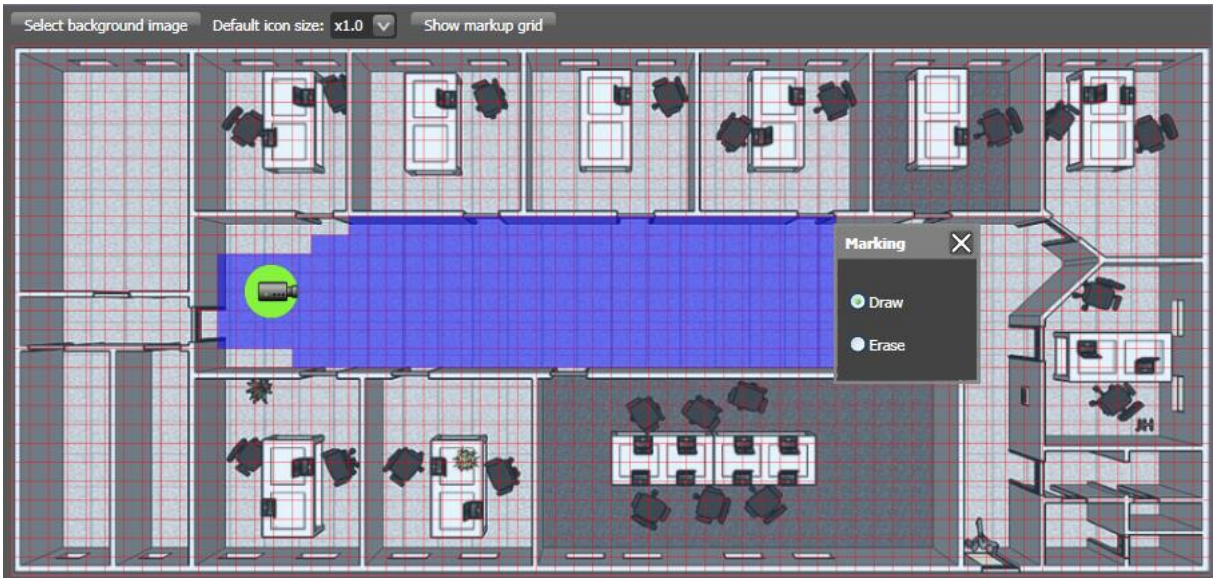
Note: Views and other siteplans cannot be rotated.

After selecting an object with single left mouse click the Show markup grid button appears on top of the siteplan. This button opens a grid overlaying the whole siteplan.



With open grid the left mouse can be used to markup an area within the siteplan that shall be linked with the selected object. As a default the area around the object is already marked. Activate Erase to unmark areas.

The following example shows a configuration where the marked area represents the viewing area of the camera. This viewing area is limited through walls and through the camera lens. The marked area is linked to the camera. This allows to open the camera by simple leftclick in the corridor, when using this siteplan.



5.9.2 Delete siteplan

Press the Delete button to delete the siteplan previously selected in your summary list from the digivod® system. Click OK to irrevocably delete this camera. Click Cancel to cancel this process.

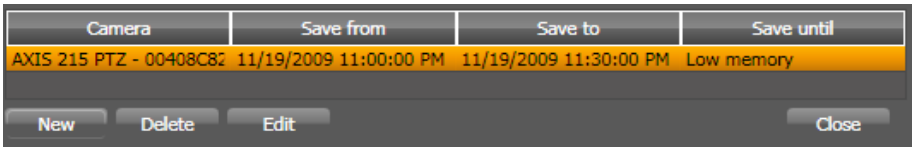
5.9.3 Edit siteplan

Using the Edit button you can alter an existing siteplan as described in chapter New siteplan.

5.10 SaveLock

Selecting the menu option

will open SaveLock administration, enabling you to manually create and delete SaveLocks (see New rule / 'Lock' action)

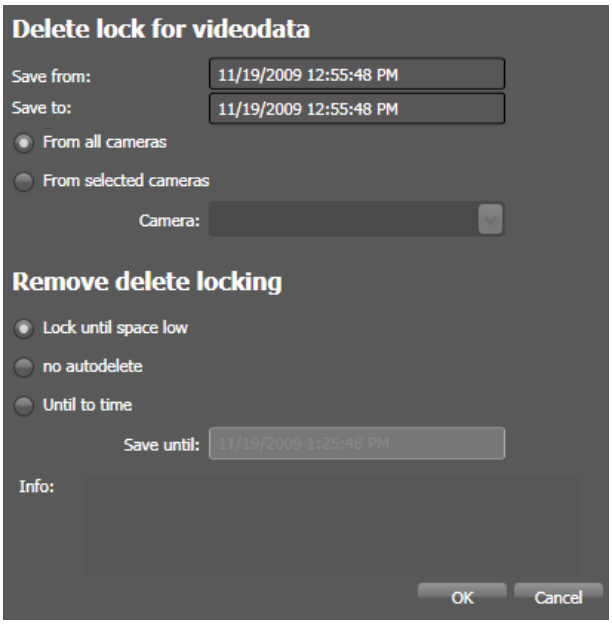


The summary table displays a list of all existing SaveLocks. The first column lists the camera whose video data will now be protected through SaveLock from being deleted by the digivod® cleaner (see digivod® cleaner). The second column indicates the start time of the protection interval, and the third column states the end time of the protection interval. The fourth column defines at what point the Cleaner is scheduled to ignore this SaveLock and will be allowed to delete your protected data.

5.10.1 New SaveLock

Create a new SaveLock by pressing the

button. The next window enables you to enter data in a similar procedure as described in New rule / 'Lock' action.



Enter start and end time of your video recordings to be protected from deletion (keep date format!).

Below, choose the specific cameras this SaveLock will be applied to. You may either select all cameras or just a single one.

Deletion of locked video data will depend on your settings defined under 'Remove delete locking'.

Lock until space low	Will delete automatically or upon reaching a free memory threshold (see digivod® cleaner)
no autodelete	Video data protected by SaveLock will never be automatically deleted. **Note:** This option might possibly cause your memory area defined for storing video data to overflow!
Until to time	From the time entered into this field, the Cleaner will be allowed to delete video data protected by SaveLock.

Note: By default digivod® stores video data in one minute blocks. According to length and location of a savelock, in most cases the resulting protection area will be longer than selected here.

5.10.2 Delete SaveLock

Press the Delete button to remove the SaveLock previously selected in your summary list from the digivod® system. You will be prompted for confirmation. Click OK to irrevocably delete this SaveLock. Click Cancel to cancel this process.

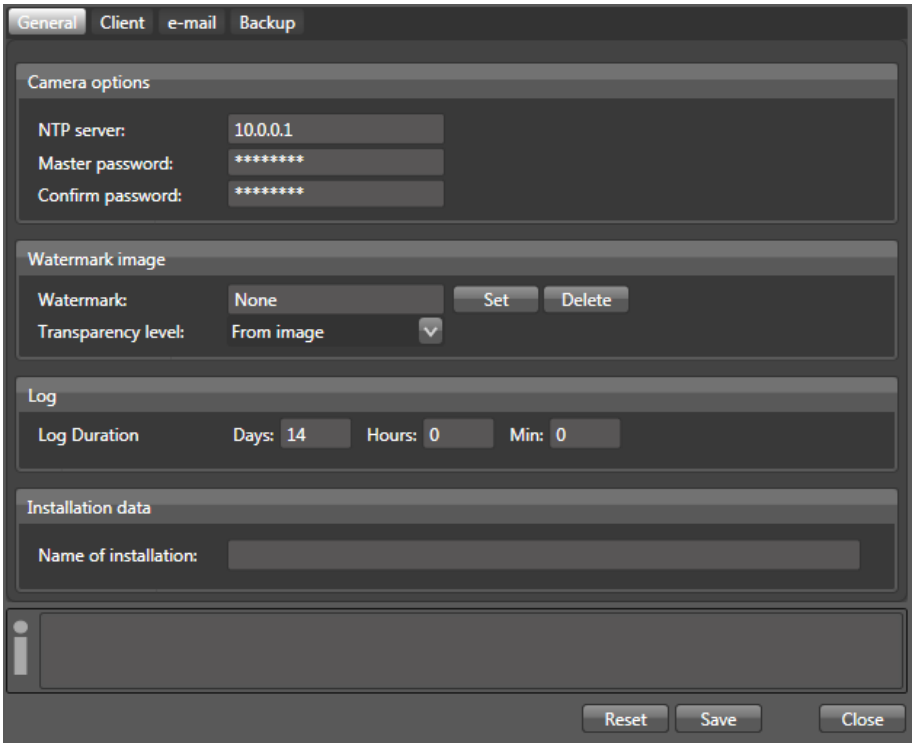
5.10.3 Edit SaveLock

Using the Edit button you can alter an existing SaveLock as described in chapter New SaveLock.

5.11 Settings

Selecting the menu option will open system settings administration, enabling you to centrally define important settings for your digivod® installation within separate tabs.

5.11.1 General settings



NTP Server

IP address of the NTP server (Network Time Protocol) that shall be set into the cameras when using the automatic camera discovery (see New camera (automatic)). By default this will be the IP address of your digivod® server. This ensures time synchronisation between your cameras and the server, using Windows NTP Service.

Note: Please follow the instructions given in chapter NTP configuration.

Master password

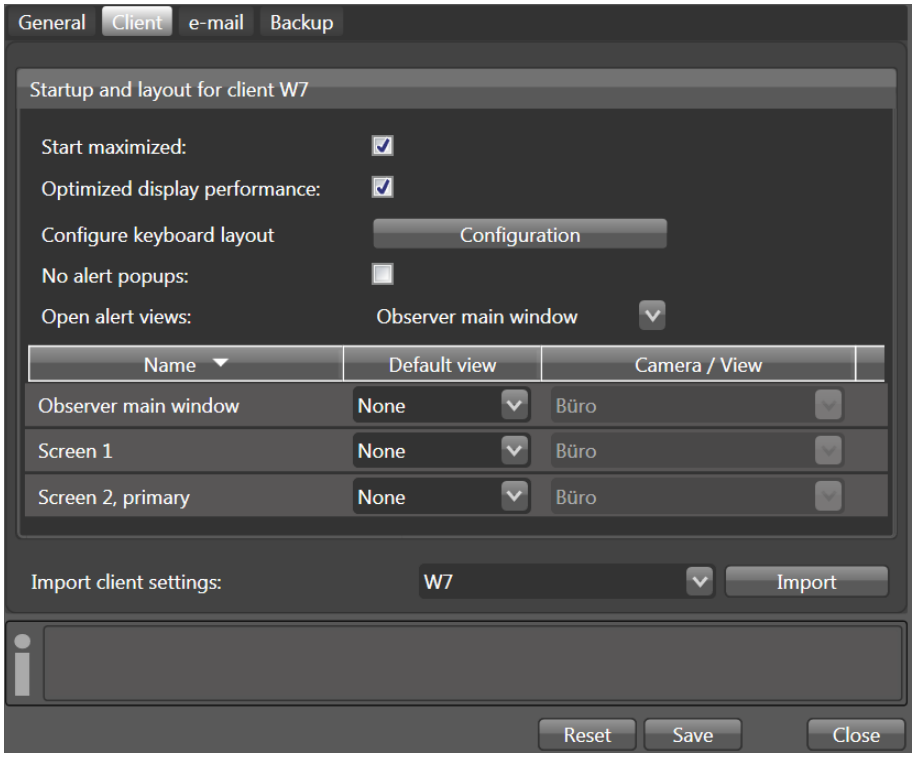
Password for administrator access to your cameras

Note: The master password should be entered and saved before the automatic camera discovery can be used (see New camera (automatic)).

Important: If a camera is in factory mode and uses the manufacturers default password camera discovery will set the master password on the camera.

Confirm password	Confirmation of your master password
Watermark	name of a file (.bmp, .jpg oder .png) that shall be used as watermark when exporting a screenshot. Use the Set button to open the file windows file selection dialog. Use the Remove button to remove the setting of a file.
Transparency level	number between 10 and 250 that defines the transparency level of the watermark (high value = high transparency). When selecting a .png-file as watermark file the transparency can be read from the file (’From image’).
Log duration	Time in days and hours you want your log data to be stored (including events and alerts) in the internal database.
Installation data	Unique name of the installation or the object (important for the identification of exports and reports if digivod® is used at several locations or for several customers.)

5.11.2 Client settings



Start maximized	Specifies whether you want digivod® observer to start within a maximized window.
Optimized display performance	If this mode is active, DirectX features of modern graphic adapters will be used to achieve a smoother video playback. **Important:** Not all graphic adapters support this mode.
Configure keyboard layout	Configuration opens the dialogs for the client specific keyboard assignments (see Key configuration)
No alert popups	Alert popups will automatically be shown on this client.
Open alert views	Specifies which monitor will display alert windows (see New rule View' action, List of incoming alerts and Alertlist)
Screen Default view Camera / View	Specifies the camera, view, tour or siteplan shall be opened by default when starting the observer or closing a view manually or by schedule (see Rules). This can be defined for the observer main window as well as for all available screens.
Import client settings	This function can copy (import) existing client settings from another client to this client. Select the client from the list that you want to copy from. Press Import and then Save.

Changes must be saved by pressing the Save button. Unsaved changes can be reset using the Reset button.

5.11.3 Key configuration

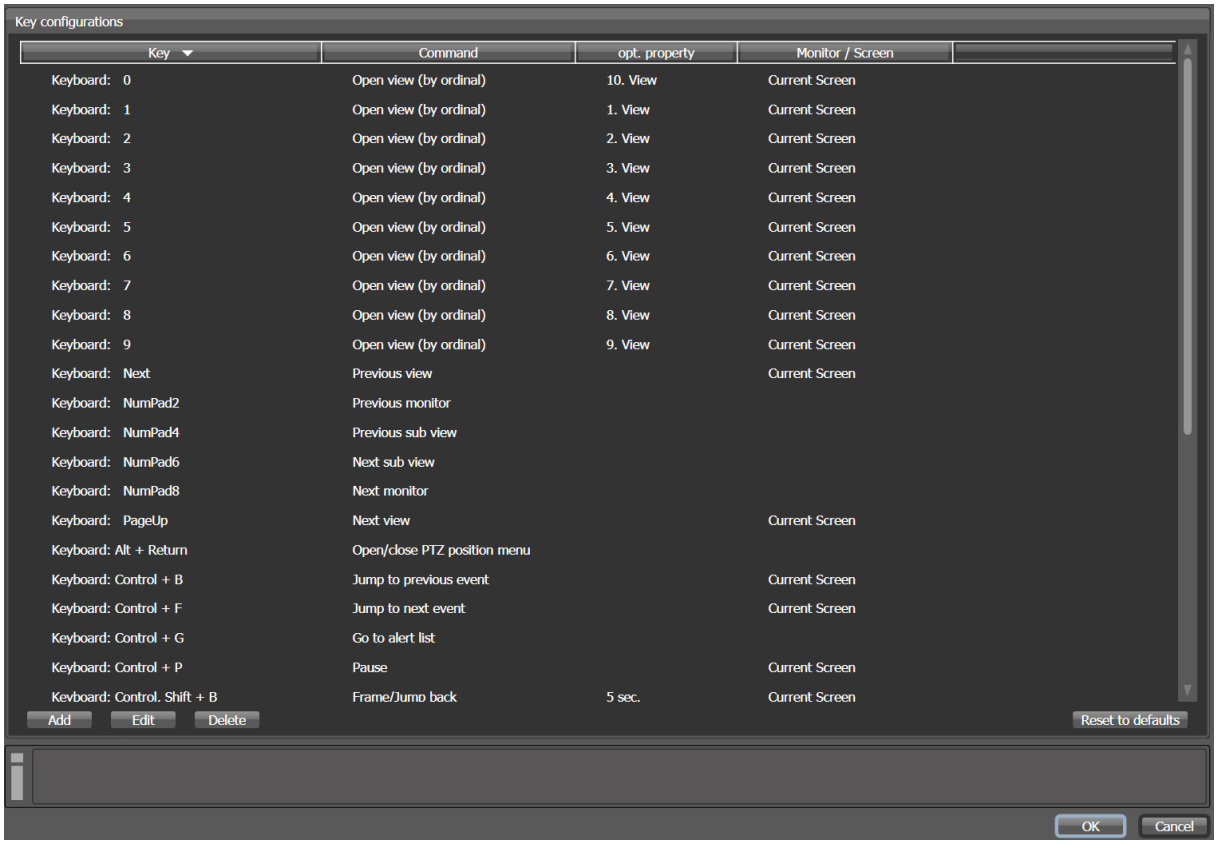
Press Configuration from the client settings menu (see Client settings) to open the key configuration dialog. In this dialog you can define the assigment between keyboard input and observer command for each single client.

Note: Also IR remote controls, function keys on PTZ joysticks, and other connected input devices generate keyboard inputs.

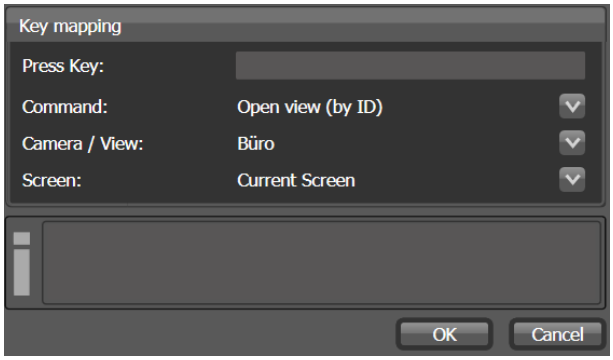
During the installtion of digivod® a standard keyboard assignement has been created. This can be extended or modified using the Add and the Edit button. Press Delete to delete the selected keyboard assignmend.

Important: If you press Reset to defaults all modifications will be reverted and manual created keyboard assignments will be deleted.

The list shows all existing keyboard assignments with their commands, optional parameters and the monitor/screen to which the command is assigned.


Key configurations
Key
Command
opt. property
Monitor / Screen
Keyboard: 0 Open view (by ordinal) 10. View Current Screen
Keyboard: 1 Open view (by ordinal) 1. View Current Screen
Keyboard: 2 Open view (by ordinal) 2. View Current Screen
Keyboard: 3 Open view (by ordinal) 3. View Current Screen
Keyboard: 4 Open view (by ordinal) 4. View Current Screen
Keyboard: 5 Open view (by ordinal) 5. View Current Screen
Keyboard: 6 Open view (by ordinal) 6. View Current Screen
Keyboard: 7 Open view (by ordinal) 7. View Current Screen
Keyboard: 8 Open view (by ordinal) 8. View Current Screen
Keyboard: 9 Open view (by ordinal) 9. View Current Screen
Keyboard: Next Previous view Current Screen
Keyboard: NumPad2 Previous monitor
Keyboard: NumPad4 Previous sub view
Keyboard: NumPad6 Next sub view
Keyboard: NumPad8 Next monitor
Keyboard: PageUp Next view Current Screen
Keyboard: Alt + Return Open/close PTZ position menu
Keyboard: Control + B Jump to previous event Current Screen
Keyboard: Control + F Jump to next event Current Screen
Keyboard: Control + G Go to alert list
Keyboard: Control + P Pause Current Screen
Keyboard: Control, Shift + B Frame/Jump back 5 sec. Current Screen
Add
Edit
Delete
Reset to defaults
OK
Cancel

Press Add to open the creation dialog for new keyboard assignemts:



Note: Count and content of the lines that are shown below the command are depending on the type of the command.

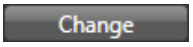
Note: All commands for player control (see digivod® player) will only be executed if there is an active camera / view opened on the selected screen where this command can be applied to.

Important: Commands can only be executed, if the digivod® observer has the focus and if the user has the required privileges (see Privileges (user groups) and Users)

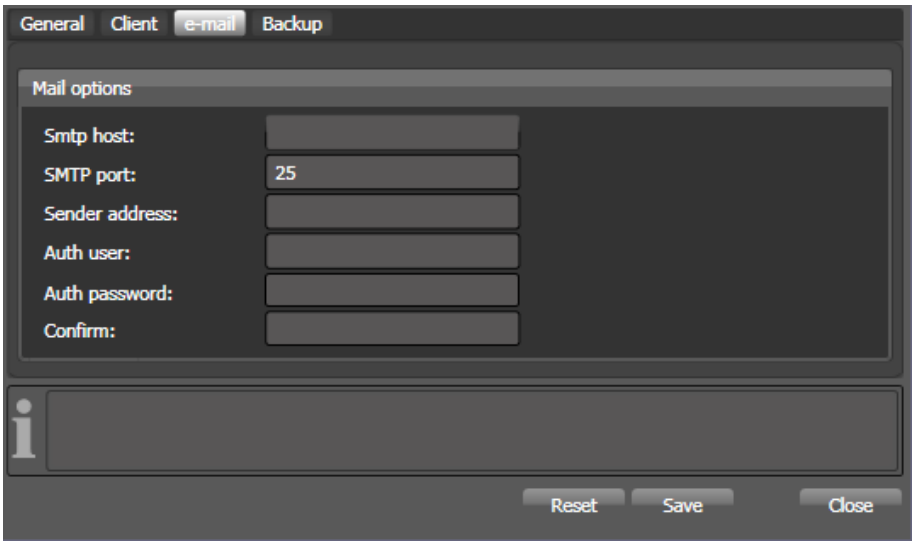
The following commands are available:

Open view (by ID)	Opens the selected view/camera defined by its name on the selected monitor/screen.
Open view (by ordinal)	Opens the selected view/camera defined by its position within the navigation tree (see Navigation tree) on the selected monitor/screen **Note:** Only the first ten views/cameras can be selected. If you select a view/camera that does not exist no action will be executed. **Important:** The position of a view/camera withi the navigation tree might be changed by renaming or changing its group name (see Cameras).
Go to PTZ preset (by ID)	Moves the selected PTZ camera to the PTZ preset defined by its name. Fährt die in den Parametern angegebene PTZ-Kamera auf die über den Namen ausgewählte PTZ-Position.
Go to PTZ preset	Moves the selected PTZ camera to the PTZ preset defined by its position within the list of PTZ positions for this camera.
Live	Switches the view/camera on the selected screen to live.
Pause	Switches the view/camera on the selected screen to pause.

Play	Switches the view/camera on the selected screen to play.
Frame/Jump back	Jumps the view/camera on the selected monitor/screen one frame back, if this view/camera is in pause mode. Jumps the view/camera on the selected monitor/screen the selected number of seconds back, if this view/camera is not in pause mode.
Jump to next event	Jumps the view/camera on the selected monitor/screen to the next event, if this view/camera is not in live mode.
Jump to previous event	Jumps the view/camera on the selected monitor/screen to the previous event.
Play/pause toggle	Toggles the display of the view/camera on the selected monitor/screen between play and pause. **Note:** Playback will start in the last active speed.
Frame/Jump forward	Jumps the view/camera on the selected monitor/screen one frame forward, if this view/camera is in pause mode. Jumps the view/camera on the selected monitor/screen the selected number of seconds forward, if this view/camera is not in pause mode.
Fastback	Jumps the view/camera on the selected monitor the selected number of seconds into fastback (see Fastback).
Open/close PTZ position menu	Opens respectively closes a selection list with the predefinded PTZ positions of the active camera (if this is a PTZ camera). Öffnet bzw. schließt ein Menüfenster zur Auswahl einer vordefinierten PTZ-Position für die aktive Kamera, wenn es eine PTZ-Kamera ist.
Open/close view menu	Opens respectively closes a selection list with all views/cameras.
Open/close monitor menu	Opens respecitvely closes a selection list with all monitors and screens. If there is an open view/camera on the selected monitor/screen this will be brought into foreground. If there is no open view/camera on the selected monitor/screen the selection list for views/cameras will be opened after selecting a monitor/screen.
Previous view	Opens the previous view/camera identified by its position in the navigation tree (see Navigation tree).
Next view	Opens the next view/camera identified by its position in the navigation tree (see Navigation tree).

Go to alert list	Sets the cursor focus to the top entry in the list of incoming alerts. (see List of incoming alerts).
Next sub view	In an open view this command sets the cursor focus to the next camera within this view.
Previous subview	In an open view this command sets the cursor focus to the previous camera within this view.
Next monitor	Sets the cursor focus to the next monitor if there is an open view/camera on this monitor.
Previous monitor	Sets the cursor focus to the previous monitor if there is an open view/camera on this monitor.
max/min selected subimage	Maximizes respectively minimizes the currently selected subimage within a view.
Focus (nearer)	Changes the camera focus of the currently selected camera so that closer objects will be sharper (not supported by all cameras).
Focus (farther)	Changes the camera focus of the currently selected camera so that more distant objects will be sharper (not supported by all cameras).
Autofocus	Activates the autofocus of the currently selected camera (not supported by all cameras)
Close iris	Changes the iris of the currently selected camera so that less light is coming through (not supported by all cameras).
Open iris	Changes the iris of the currently selected camera so that more light is coming through (not supported by all cameras).
Multiple action	Allows to create a sequence of several commands (actions) that are performed in succession. After a multiple action was added use the  button to create or modify the command sequence. All comands that are listed here are available. Optionally a multiple action can be named. This name can be used to trigger the multiple action as a client action within a rule (see Rules).
Keyboard Enter	Emulates the Enter key
Keyboard Esc	Emulates the Esc key

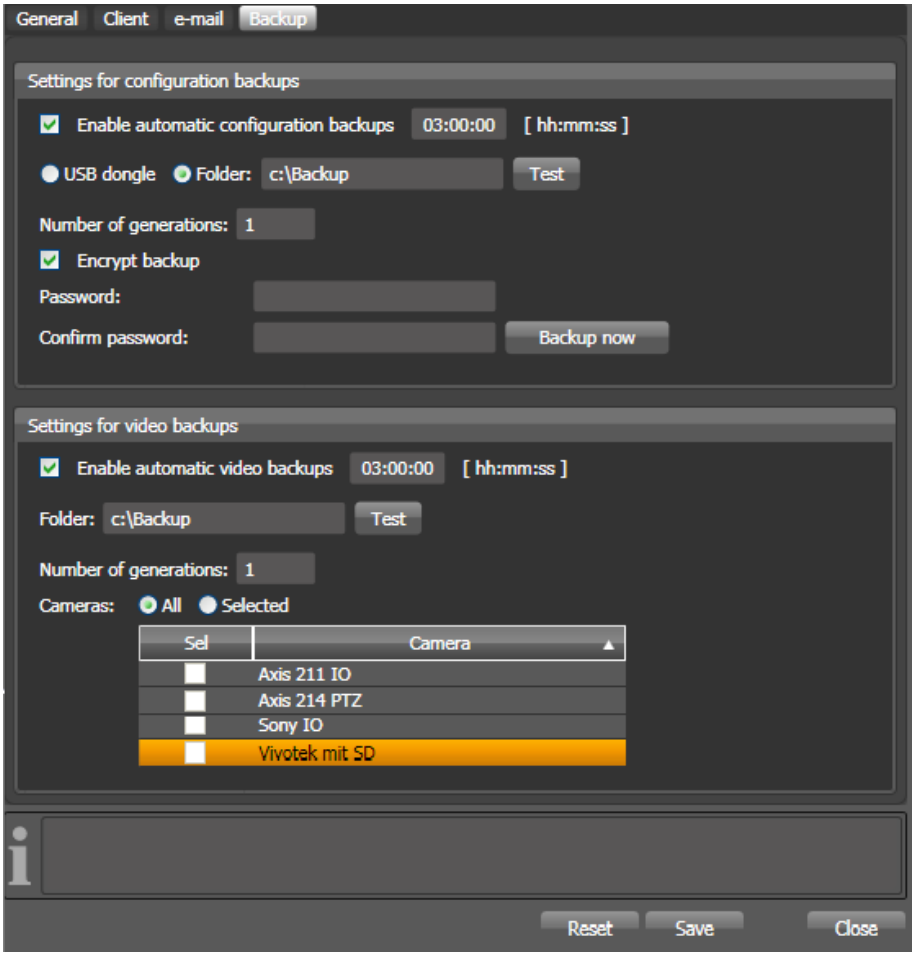
5.11.4 e-mail settings



SMTP host	Name of the smtp of server used for sending e-mails
SMTP port	Port of this server (by default: port 25)
Sender address	e-mail address of the sender
Auth user	Authentified user for accessing the SMTP server
Auth password	Password for this user
Confirm	Confirmation of your password

5.11.5 Automatic backups

With this tab you can set parameters for an automatic or manual back-up of your digivod® configuration data and video data.



Enable automatic configuration backups	Switches the automatic backup mode on or off. If activated, the system will create a daily back-up.
Time	Time at which the automatic configuration backup shall be created.
USB Dongle / Folder	Saves a backup of configuration data on your digivod® dongle. Alternatively select a folder in the file system. **Note:** This folder selection refers to the server! Use the Test button to check whether the selected server folder exists.

Number of daily gernerations to keep	Specifies the number of backup ‘generations’ you wish to be kept.
Encrypt backups	Activates backup encryption using the password specified below
Password / Confirm Password	Password for encrypting your backup data
Backup Now	Manual start of configuration data backup

Note: Use the „BackupRestoreWizard.exe“ located in the digivod® program folder (see Installation of digivod®) to restore a digivod® configuration.

After starting the „BackupRestoreWizard.exe“ you will be asked where your backups are located. If there is more than one configuration backup you have to select one of these. Then you have to enter the password that has been used to encrypt the backup (nothing to enter if the backup is unencrypted). Confirm the final question and wait until the tool reports the result.

Important: If you want to restore a configuration data backup on a computer with another name you must open the storageset administration for each single storageset and close it with OK again (see Storagesets). This will update the new computer name within the storageset parameters. (see Changing the hostname)

Enable automatic video backups	Switches the automatic backup mode on or off. If activated, the system will create a daily back-up. **Note:** Video backups may become very large. Use video backups only for special requirements.
Time	Time at which the automatic video backup shall be created.
Folder	Saves a backup of configuration data in the folder system **Note:** This folder selection refers to the server! Use the Test button to check whether the selected server folder exists.
Number of daily gernerations to keep	Specifies the number of backup ‘generations’ you wish to be kept.
Cameras	Select the cameras that shall be included in the video data backup

Note: The backup will be stored in an automatically generated folder. The name of this folder represents the backup time. Content and structure of this folder are identical to the folders that are generated when using the list export function (see Video export). Video backups cannot be importet back into digivod®. They can be opened and evaluated using the digivod® offline player. To start the digivod® offline player doubleclick the script file named “StartViewer”. This file will be stored within the backup folder at the end of the backup creation.

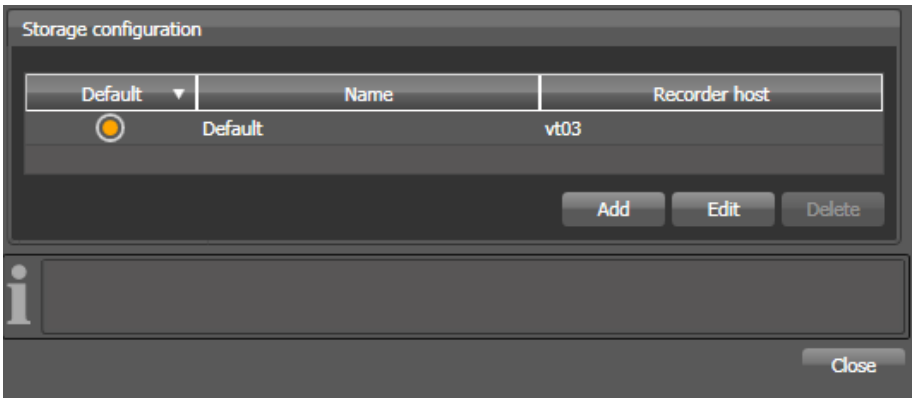
5.12 Storagesets

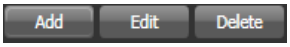
Selecting the menu option

will open the administration of storagesets. The directory that has been choosen as video directory during the installation (see Installation and first steps) will be preset as standard storageset named ‘Default’.

In big installations or in case of specific requirements concerning the time of archiving videodata it might be necessary to define additional storagesets.

For very big installations, the storagesets in multi recording operation of the digivod® ENTERPRISE edition (see digivod® editions) can be distributed across several recorders.

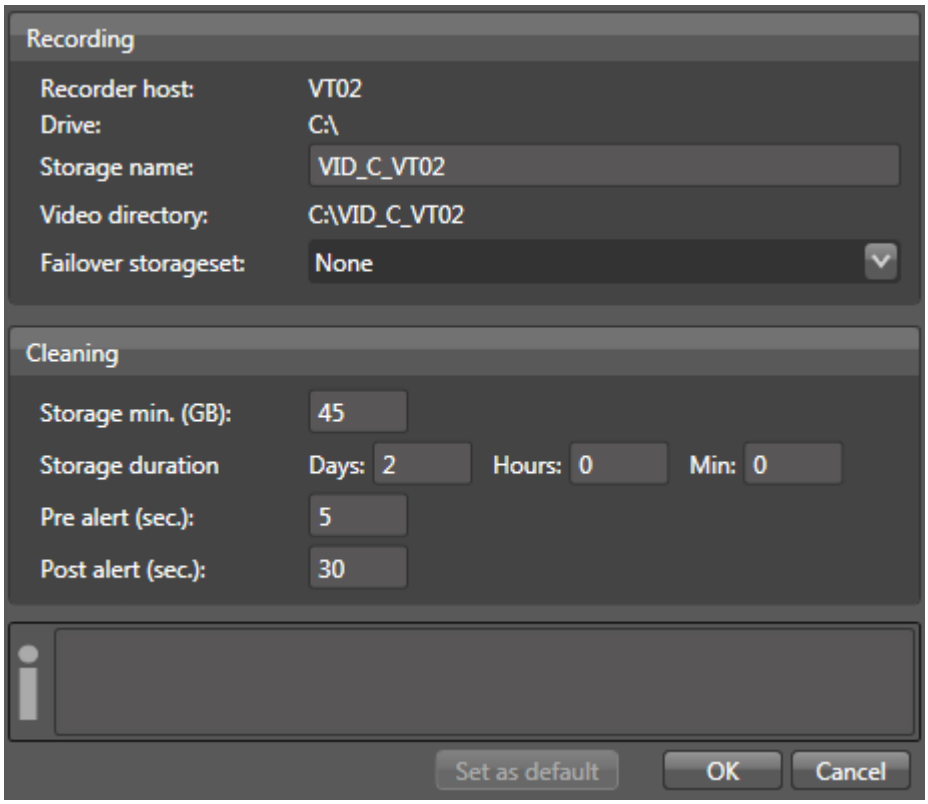


Use the 

buttons to create, modify or to delete additional storagesets.

Note: The deletion of a storageset deletes all archived video data in this storageset. At least there must be one storageset left. This means you cannot delete the last storageset.

With a double click on the line of a displayed storageset you can also open the dialog box for editing the settings of this storageset.



Note: Make sure that there is sufficient storage space for the video data at the selected storageset.

Note: It is recommended to store video data on a separate partition or several separate partitions or, even better, on its own physical drive.

Note: Please take into account that the network load will double if you select a network drive (server or NAS) in the camera network as the folder for storing the video data.

Recorder host	Select recorder (in multi recording mode this also selects the host) as a target platform for the new storageset. **Note:** Only in multi recording mode there is a selection list for this field. This list shows all recorders that are currently connected to this server. If you are not using the multi recording option you cannot enter this field. By default the local server will be preset. (see Instructions for multi recording installation) **Note:** Once selected the recorder host cannot be changed.
Drive	Drive on the selected recorder on which the video data for this storageset are to be stored. **Note:** The specifications given here only refer to the server! It is only possible to select a drive when a new

	storageset is created. The drive of an existing storageset cannot be changed. When a new storageset is created, digivod® calculates the available overall memory and the free memory on this drive. This results in proposed values for the size of the minimum memory that can be changed further down in the dialog box, if necessary.
Storage name	Logical name of the storageset
Video directory	Directory on the selected drive of the recorder in which the video data for this storageset are to be stored. **Note:** The specifications given here only refer to the server! It is only possible to enter a directory name when a new storageset is created. The name of an existing directory cannot be changed. When creating a new storageset digivod® proposes a directory name combining recorder and drive name. This can be overwritten.
Failover storageset	Optionally it is possible to define a failover storageset for this storageset for multi recording operation with activated failover (see Instructions for multi recording installation) or Failover) with a digivod® ENTERPRISE edition (see digivod® editions). If a recorder fails, the recordings on the storagesets of this recorder are continued on the failover storagesets defined for these storagesets.
Storage min. (GB)	Minimum free memory in gigabyte which the Cleaner has to ensure to be available (see digivod® cleaner).
Storage duration	Time in days and hours you want your recordings to be stored (might not be possible if memory is running low).
Pre-Alert	number of seconds of video data before an event triggering event that will be saved in the archive when using an event based schedule (see Schedules for recording parameters) **Note:** By default digivod® stores video data in one minute blocks. According to length and location of an alarm, in most cases the resulting pre- and post-alarm times will be longer than selected here.
Post-Alert	number of seconds of video data after an event triggering event that will be saved in the archive when using an event based schedule (see)

Note: By default digivod® stores video data in one minute blocks. According to length and location of an alarm, in most cases the resulting pre- and post-alarm times will be longer than selected here.

Use this button to make the storageset that is currently being processed to be the standard storageset.

Note: Switching the standard storageset has no impact during runtime. When creating New cameras (see Cameras) this this new standard storageset will be suggested as default.

Use

to confirm and

to revoke your inputs.

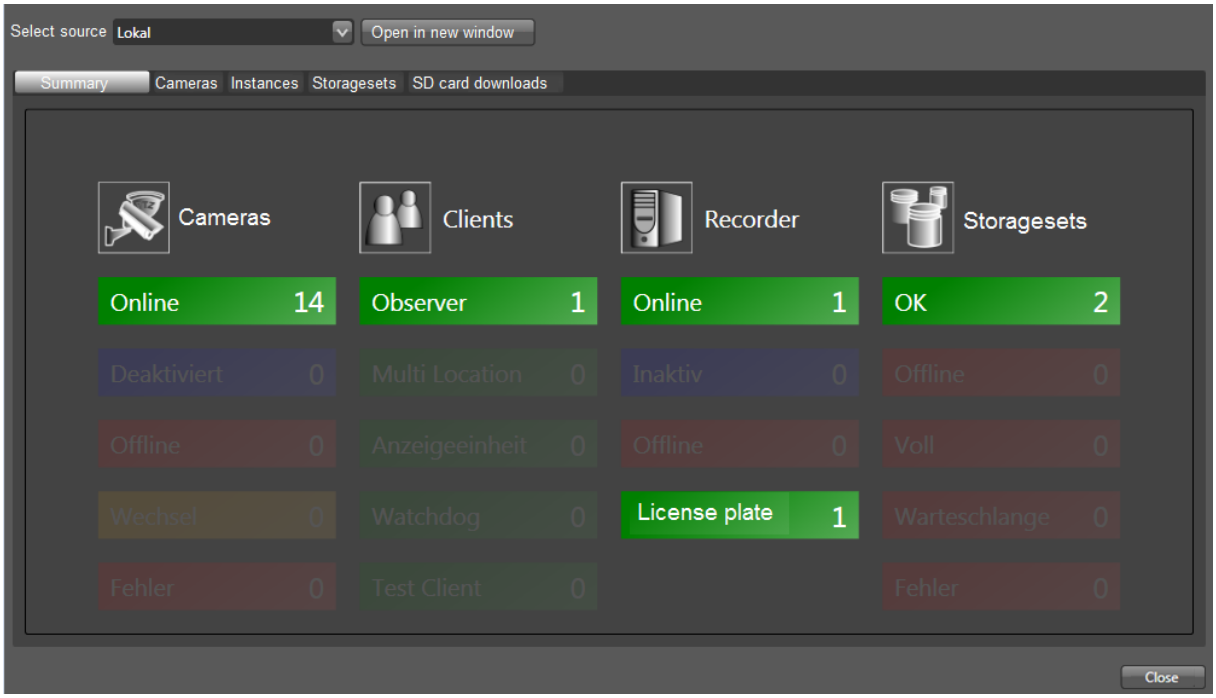
5.13 System state display

Selecting the menu option System state from the main menu (see digivod® main menu) will open an overview with important system informations. Click or Close to close this window again.

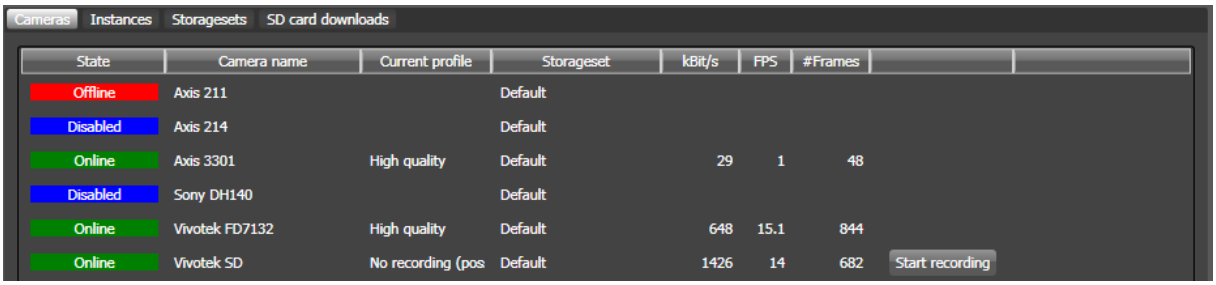
For clarity this window is divided into tabs.

On a Multi-location server (see External sources (Multi-Location edition only)) you can select the source for the following display in the filed behind ‘Select source’.

The first tab shows a compact system overview. The colors make recognizable at a glance, whether the system works fine (everythin green). Elements not shown in green colour mark a peculiarity.



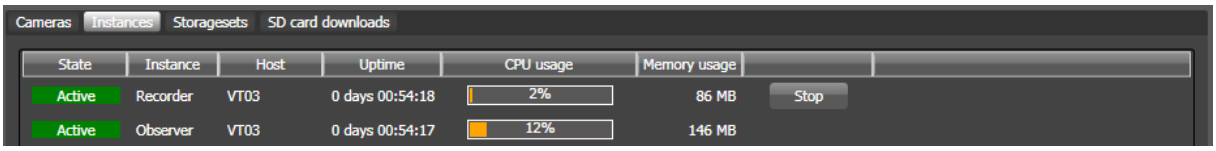
The ‘Camera’ tab shows detailed informations about all cameras that are known in the system.



Note: The following camera statuses can be displayed: online (green), offline (red), disabled (blue) and changing (orange). The status changing will be shown during an ongoing connection or disconnection.

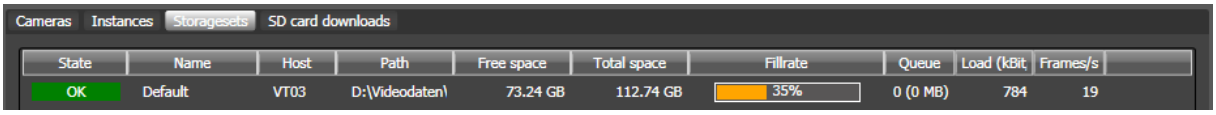
If a camera uses the schedule 'No recording' (see Schedules for recording parameters) the buttons Start recording and No recording can be used for manual start and stop the recording.

The 'Instances' tab shows informations about the single system instances. In this example it is a local client/server-installation (see Installation and first steps) that currently consists of recorder and observer only.

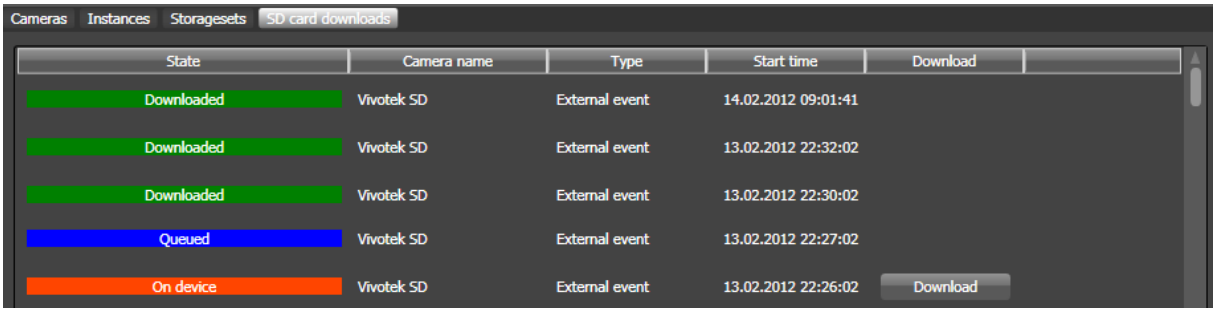


Note: Stopping the recorder will terminate all recordings!

The 'Storagesets' tab shows detailed information about the storage sets that have been created in the system (see Storagesets).



The 'SD card download' tab shows detailed information about the status of SD card recordings (see SD card recording (camera settings) and SD card recording (general settings)).



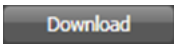
Note: From the perspective of digivod® a SD card videofile can have one of the following statuses:

Downloaded (green) means that this file has been downloaded and stored into the digivod® archive.

Queued (blue) means that this file is in the queue to be downloaded or the download is in progress.

On device (red) means that this file is still on the device.

Note: The download does not delete video files from the SD card. Follow the manufacturer instructions to setup the deletion within the camera.

Note: The 

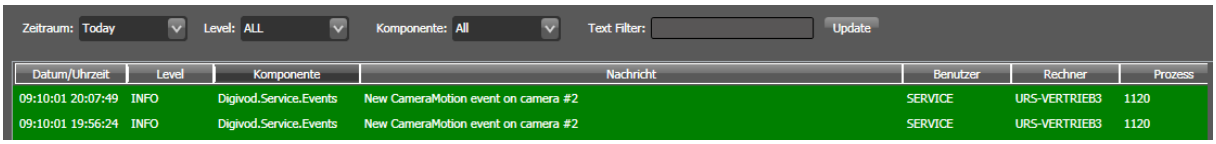
button only appears if the user has sufficient privileges to start the manual SD card download (see Privileges (user groups)).

5.14 System log display

Selecting the menu option

in your digivod® main menu (see digivod® main menu) will open a window containing the system log opens. Press

to close this window again.



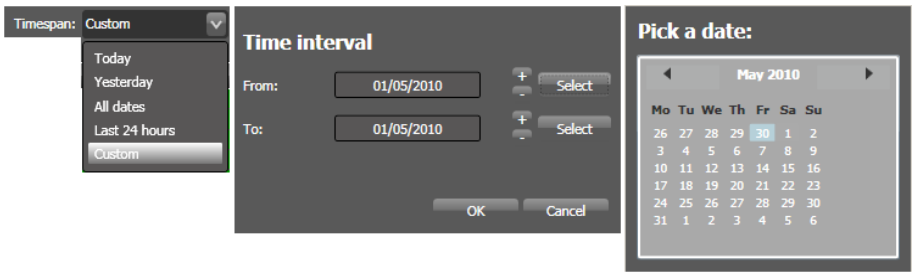
The displayed system events may be limited, i.e. filtered, by selecting from the fields ‘Period/’, ‘Level’, ‘Component’, or by entering a freely defined search text in the field ‘Text filter’. After entering a filter, update your display by simply hitting the

button.

Beside the predefined values for ‘Today‘, ‘Yesterday‘, ‘All dates‘ and ‘Last 24 hours‘ there is another option to enter a free choice of days from entering or selecting from a calendar.

The selection can be made using the + and – Buttons or via a day calendar that can be opened clicking the

button.



Note: System events are archived in a file named Service.log. This file is located in c:\windows\service profiles\NetworkService\VideoService\log.

6. Video sensor (Motion detection)

Your digivod® system is able to fully integrate Motion detection systems generally implemented in most cameras; furthermore, detected movements can also be used as events triggering an alert.

Camera-internal, and thus de-centralized, video sensor systems provide the crucial advantage of not being a load on your digivod® system resources. Together with your image files, the movements detected by your camera will be sent, to digivod® and will then be interpreted according to your specified parameterization details stored in your digivod® system.

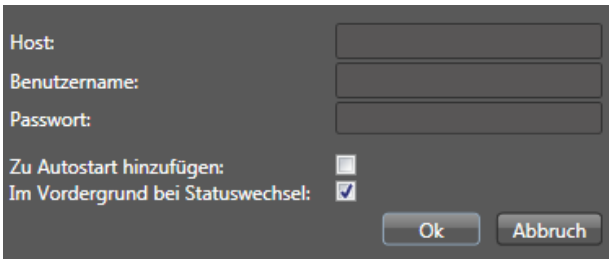
For details on how to set options of individual cameras please refer to instructions of your camera manufacturer. Within your digivod® system, a Motion detection system parameterized within the camera may be enabled or disabled under camera administration (see Edit camera).

7. Video status monitor

The video status monitor is a standalone application that can permanently display a minimized system state summary (see System state display) in the windows info area.

7.1 Start and setup

The video status monitor can be started from the windows start menu using Video Status Monitor in the digivod® program group.



The video status monitor connects itself to the digivod® server on the selected host and visualizes the system status of this server. Similar to the user login (see Starting and exiting digivod® observer) enter the credentials to establish the connection of the video status monitor.

Note: The video status monitor does not require administrator access. You should create an own user with at least system permissions for “Observer login” and “Access system state” (see Users and Privileges (user groups)).

If you activate Zu Autostart hinzufügen: ☐ video status monitor will automatically be started during windows login.

If you activate Im Vordergrund bei Statuswechsel: ☑ a change of a status of one of the monitored components will automatically pop up the status display for about 5 seconds.

Confirm and close the screen with OK.

7.2 Operation and handling

After starting the video status monitor it connects to the specified digivod® server and appears as an icon in the windows info area

The colours of this icon symbolize the status of the monitored system:

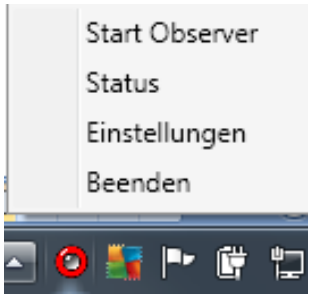
All important components of the monitored system are online respectively active.

At least one component of the monitored is currently changing its status, means it is not longer online/active or it is not back online/active yet.

At least one component of the monitored system is permant offline on on failure or full.

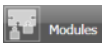
A single leftclick on the icon of the video status monitor opens a compact version of the status dialog (see System state display). After 5 seconds this view will automatically be closed again.

A single rightclick on the icon of the video status monitor opens the context menu.



From this menu you can start the observer or open the compact status display or open the settings dialog (see Start and setup). You can also terminate the video status monitor.

8. Modules (optional)

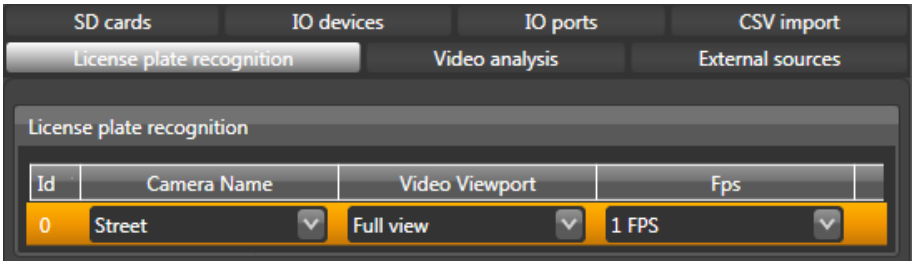
Selecting the menu option 

will open the administration of optional digivod® modules.

Note: Depending on your licence and your individual digivod® Edition, some of the tabs might not be visible or cannot be navigated.

8.1 License plate recognition

In this tab the parameters for license plate recognition can be set. This function is an option. For further details see license plate recognition manual.

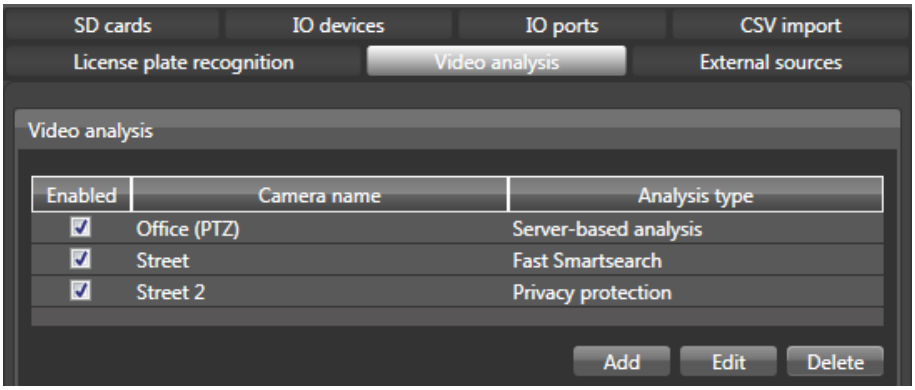


8.2 Video analysis

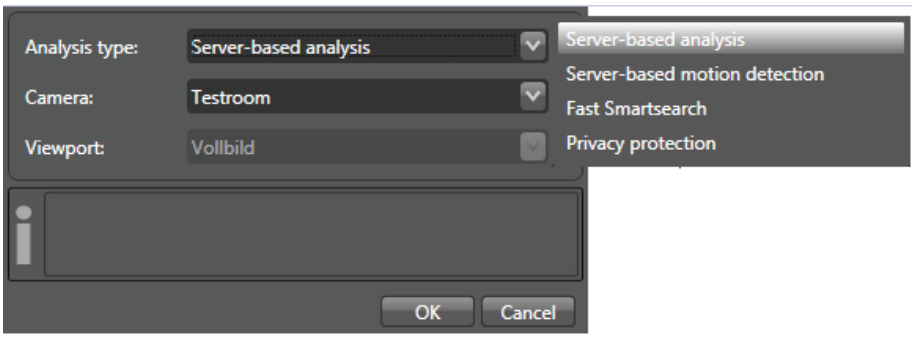
In this tab parameters for the different type of optional server-based video analyses can be set.

Important: The count of video analyses that can be defined here is type specific and depends on the digivod® license. For one camera only one video analysis can be defined.

The list shows cameras that are already running with a video analysis.

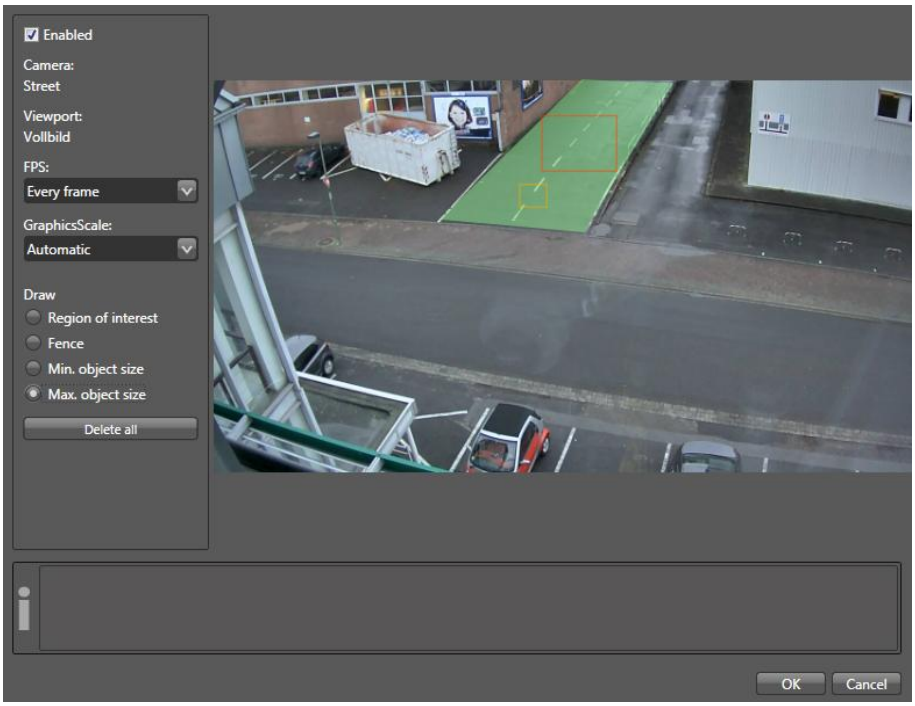


Click Add to create a new video analysis. Use at the end oft he line to select the type of analysis. The list only shows unused licensed analyses. Below use at the end of the camera line to select the camera respectively the viewport for which the new video analysis shall be created. Cameras that already run with any analysis are not longer shown in the list.



Click Delete to delete the marked analysis. Doubleclicking a row or clicking the Edit button starts the parameter dialog for a single analysis.

8.2.1 Server based analysis (outdoor protection)



The checkbox ‘Enabled’ allows to enable respectively to disable this single analysis.

Note: A deactivated analysis does not generate events.

The selection below FPS (frames per second) defines, how many frames are to be analysed from this camera. If analyzing scenes with fast moving objects its recommended to select a high framerate. In doubt a high value shall be chosen.

Note: The number of frames to be analysed has a direct impact on the workload of the processor of the digivod® server.

Note: At low frame rate it might be possible that the visualization of the analysis results (frames marking the moving objects) cannot follow the movement of these objects.

The selection below ‘Scale’ defines the solution of the frames to be analysed. It is recommended to select ‘Automatic’. This will optimize the framesize for the internal analysis algorithm.

Whe selecting ‘Full image’ the maximum resolution will be used for the analysis. This might be internally reduced and be less than the camera solution. Selecting ‘Half size’ causes a reduction of the resolution down to 320 x 240 pixel. ‘Quarter size’ reduces the single frames down to 160 x 120 pixel before they are analysed.

Note: Small object might not be noticed by the analysis when reducing the solution of the frames to be analysed.

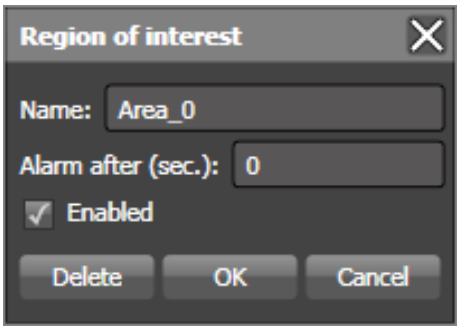
Note: The reduction to ‘Half size’ or ‘Quarter size’ also reduces the processor performance used by the analysis process down to a quarter or to a sixteenth compared to ‘Full image’.

Below the text Parameters the areas of interest, virtual fences and the minimum / maximum object sizes can be defined.

8.2.1.1 Region of interest

Select ‘Region of interest’ and hold down the left mouse button to draw freely defined polygons that mark the area to be analysed. Objects moving within such an area can trigger events. When releasing the mouse button the polygon will automatically be completed.

The next window allows to define a name for this region. The name of a region can be used within the rule triggering an alert (see Rules).



‘Alarm after (sec.)’ defines a delay time. This is the minimum time for an object to be moving within the region of interest before this object will trigger an event. The checkbox ‘Enabled’ can activate or deactivate the region. When deactivated the region will not trigger events.

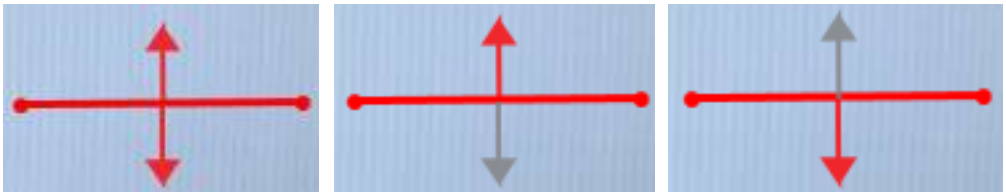
Click the right mouse button to reopen the parameter window of this region. Press Delete to remove the region.

Note: An existing region of interest can be marked for editing by doubleclicking the left mousebutton. It can be moved freely while left mouse button is down. Use the right mouse button to delete existing polygon points. Use the left mouse button to add more polygon points. A selected polygon point can be freely moved while left mouse button is down.

8.2.1.2 Virtual fences

Select ‘Fence‘and hold down the left mouse button to draw a virtual fence.

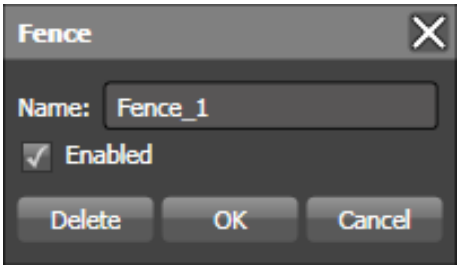
A virtual fence is represented by a red line with two rectangular vectors indicating the directions the fence can be passed. A single left mouseclick on one of the arrows of the vectors can activate or deactivate a vector.



Only objects passing a fence in the direction of an active vector will trigger an event.

The next window allows to define a name for this fence. The name of a fence can be used within the rule triggering an alert (see Rules).

The checkbox ‘Enabled’ can activate or deactivate the fence. When deactivated the fence will not trigger events.



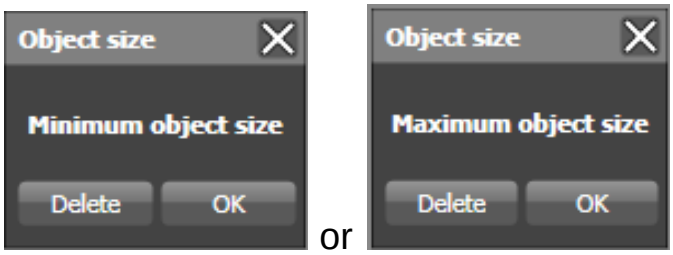
Click the right mouse button to reopen the parameter window of this fence. Press Delete to remove the fence.

8.2.1.3 Minimum and maximum object size

Select ‘Min. object size‘ and hold down the left mouse button to draw a rectangular area that defines the minimum size of objects that can trigger an event within this analysis. This rectangle is displayed in orange.

Select ‘Max. object size‘ and hold down the left mouse button to draw a rectangular area that defines the maximum size of objects that can trigger an event within this analysis. This rectangle is displayed in red.

Selecting one of these rectangles using the right mouse button opens a window where they can be deleted.



Note: The minimum object size mustn’t be bigger than the maximum object size.

8.2.1.4 Analysis in operation

A properly administered and activated analysis shows its results in live view as well as in archive playback as of rectangular frames.

It is always the entire image or the entire viewport taken into consideration of the analysis.

Green frames do mark recognized moving object outside of the region of interest.

Orange frames do mark recognized moving object inside of the region of interest that have not triggered an event yet.

Light red frames do mark recognized moving objects inside of the region of interest when triggering an event.

Dark red frames mark recognized moving objects inside of the region of interest after they have triggered an event.

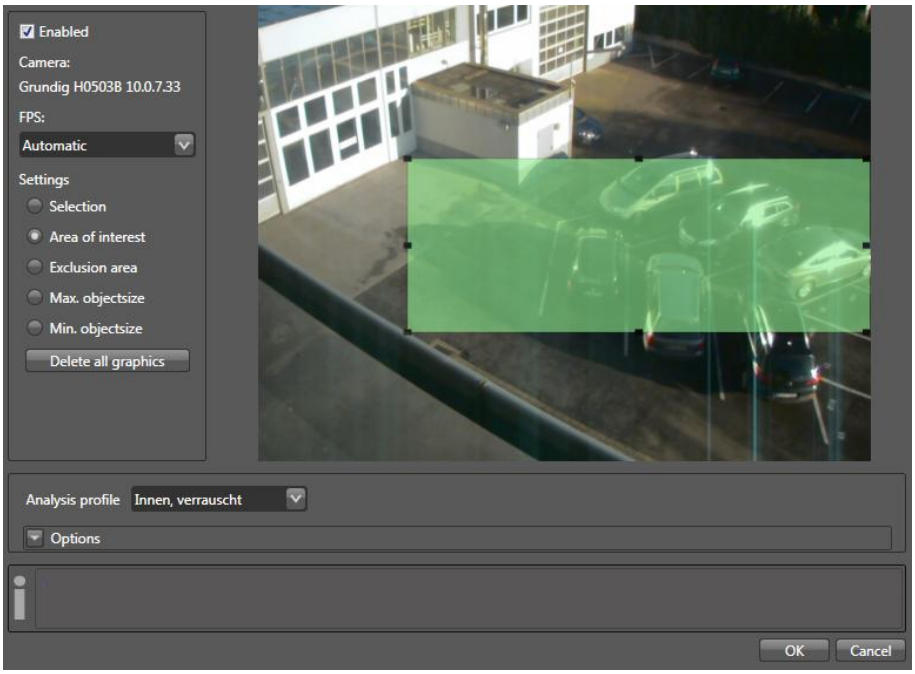
Note: To trigger an alert based on an event that has been created by the serverbased analysis it is necessary to have an activated corresponding alert rule (see Rules).

8.2.1.5 Serverbased analysis in 32 bit environment

The modules that have been integrated into the digivod® service (see Video.Service) to run the serverbased analysis (outdoor protection) can only run with a 32 Bit digivod® service. If digivod® has been installed on a 64 Bit system the digivod® service has to be set to 32 Bit manually. Proceed the following steps on the digivod® server:

- Stop Video.Service manually (see Video.Service)
- Rename
  C:\Program Files (x86)\digivod2\VideoServer.Host.Service.exe
  (e. g. into \VideoServer.Host.Service.exe_32bit)
- Rename \VideoServer.Host.Service.x86x64.exe (same directory) into \VideoServer.Host.Service.exe
- Start Video.Service manually

8.2.2 Serverbased motion detection



With the check box "Enabled" the server-based motion detection for this camera can be switched on or off.

Note: When the server-based motion detection is switched off, no events are created.

In the drop-down list "FPS (frames per second), you will define how many images of this camera are to be analysed. In case of fast-moving objects it is recommended to select the setting "Every frame". Slow-moving objects can also be detected with the setting "I-Frames only“. When in doubt, "Every frame" should be selected.

Note: The number of the images to be analysed has a direct impact on the processor power required by the server-based motion detection on the digivod® server!

Below that the alert area and the minimum and/or maximum object size are defined.

8.2.2.1 Area of interest

By selecting the button "Area of interest" up to three rectangular areas can be created by pressing the left mouse button in the preview window of the camera. The server-based motion detection triggers an event if the centre of a moving object is in an alert area and if the conditions for minimum / maximum object size are fulfilled (see Minimum and maximum object size).

An alert area can be selected by double click and be moved freely with pressed left mouse button. A highlighted alert area can be freely changed regarding its size by selecting one of the black edge or corner points.

8.2.2.2 Exclusion areas

By selecting the button "Exclusion area" up to five free polygons can be created by pressing the left mouse button in the preview window of the camera. The server-based motion detection does not trigger an event if the centre of a moving object is in an exclusion area.

An exclusion area can be selected after choosing the button "Selection". By drawing a polygon, the exclusion area can be changed. By a left click on the edge of an exclusion area, further polygon points can be added. By a right click on a polygon point, this can be removed.

8.2.2.3 Minimum and maximum object size

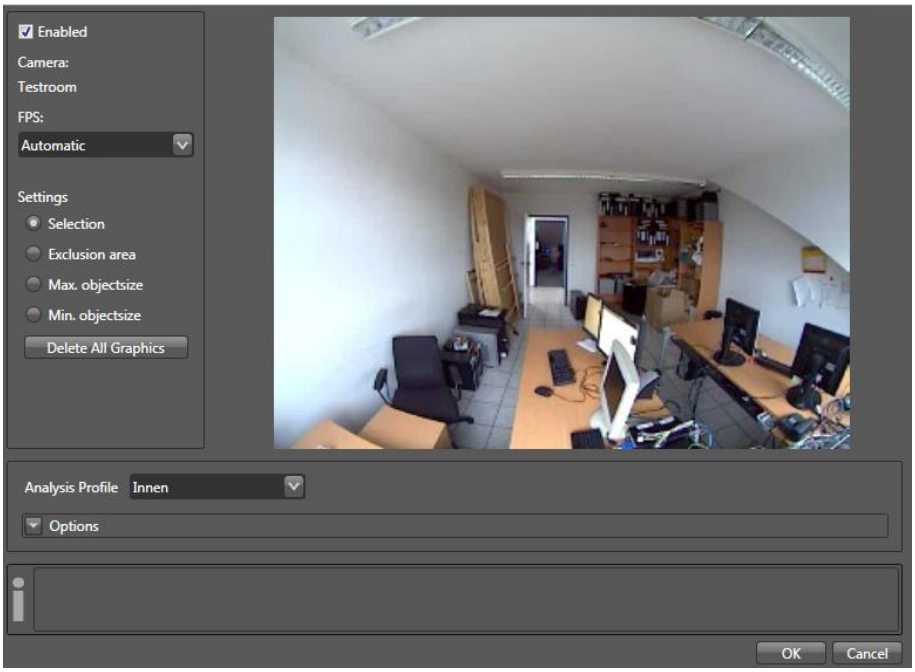
After selecting "Min. objectsize", a rectangle can be drawn with the left mouse button in the image area of the camera which determines the minimum size of an object for which the server-based motion detection is to trigger an event.

After selecting "Max. objectsize", a rectangle can be drawn with the left mouse button in the image area of the camera which determines the maximum size of an object for which the server-based motion detection is to trigger an event.

Note: The minimum object size must not be bigger than the maximum object size.

8.2.3 Fast SmartSearch

With active Fast SmartSearch video data will be analyzed for motion while recording. The results of this analysis will be stored with the video data. When using SmartSearch (see SmartSearch) this data can be used to accelerate the archive search.



Use the checkbox ‘Enabled’ to activate respectively deactivate Fast SmartSearch for this camera.

The selection below FPS (frames per second) defines, how many frames are to be analysed from this camera. If analyzing scenes with fast moving objects its recommended to select ‘Every frame’. If analyzing scenes with slow moving objects you can select ‘I-Frames only’. In general it is recommended to select ‘Automatic’.

Note: The number of frames to be analysed by Fast SmartSearch has a direct impact on the workload of the processor of the digivod® server.

Below ‘Settings’ exclusion areas and minimum / maximum sizes for objects to be detected can be defined.

Existing areas and object sizes can be selected after choosing ‘Selection’.

8.2.3.1 Exclusion areas

By default Fast SmartSearch analyses the full image. After choosing ‚Exclusion area‘ you can draw exclusion areas by holding down the left mouse button. Moving objects will not be detected inside exclusion areas.

To modify existing exclusion areas first choose ‘Selection’. Use the right mouse button to select an area. A selected area can be modified by moving and adding / removing polygon points. Use the right mouse button to delete existing polygon points. Use the left mouse button to add more polygon points. A selected polygon point can be freely moved by while left mouse button is down. Select an exclusion area in its center and hold left mouse button down to move the whole area. Press the right mouse button to open a context menu that offers selection and deletion of existing objects.

8.2.3.2 Minimum and maximum objectsize

Select ‘Min. objectsize‘ or ‘Max. objectsize’ and hold down the left mouse button to draw a rectangular area that defines the minimum respectively maximum size of objects to be detected by Fast SmartSearch.

Select a Min. / Max. objectsize rectangle in its center and hold left mouse button down to move it. Select one of its edges and hold left mouse button down to scale it.

The right mouse button opens a context menu that offers deletion of a Min./Max. objectsize rectagle.

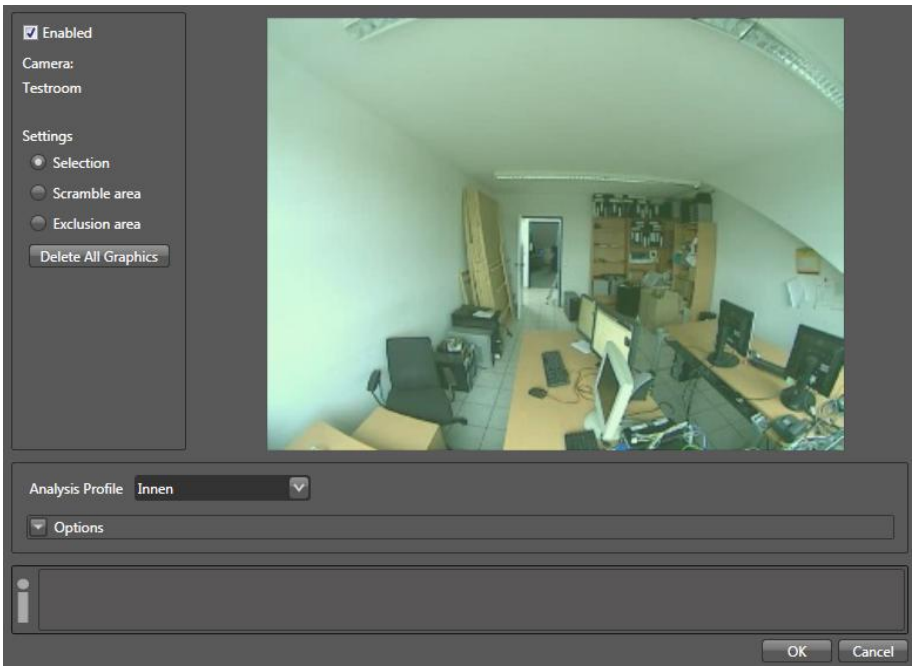
Note: The minimum object size mustn’t be bigger than the maximum object size.

Note: The hotkey Ctrl+Shift-A switches the debug mode on and off. In debug mode the results of Fast SmartSearch analysis will be shown in a short form in the live view. This mode allows to control the settings.

8.2.4 Privacy Protection

With active Privacy Protection moving objects will be scrambled. To scramble or overlay static image parts use privacy zones (see New camera (manual)).

Note: By default the user admin has the permissions ‘Disable privacy (live)‘ and ‚Disable privacy (archive)‘ for all cameras (see Privileges (user groups)). Because of this the user admin can see privacy zones and privacy protection areas unscrambled.



Use the checkbox ‘Enabled’ to activate respectively deactivate privacy protection areas for this camera.

Below ‘Settings’ scramble areas and exclusion areas can be defined. By default the whole image is set as a scramble area when creating a new privacy protection.

Existing areas can be selected after choosing ‘Selection’. If you don’t want to protect the whole image by privacy protection you can select the default area at one of its edge lines and scale it by holding down the left mouse button. When selecting an existing are in its center it can freely be moved while left mouse button is down. Choose ‘Scramble area’ to define more areas. Scramble areas are always rectangles.

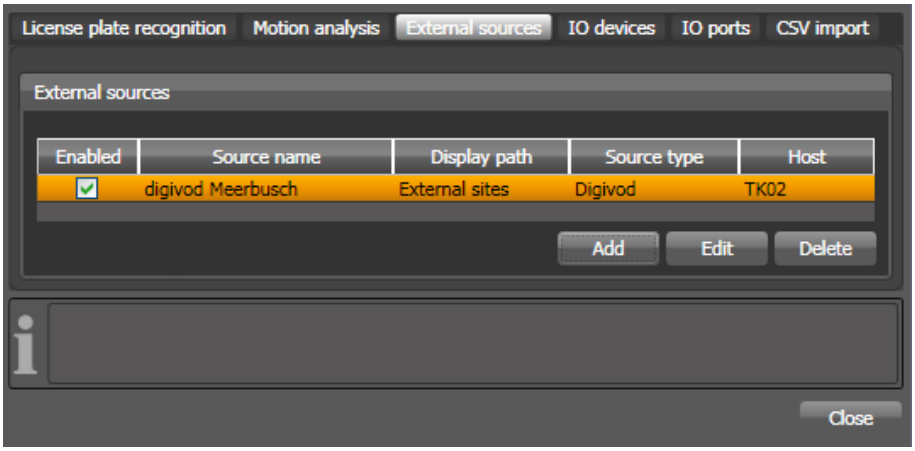
8.2.4.1 Exclusion areas

After choosing ‚Exclusion area‘ you can draw exclusion areas by holding down the left mouse button. Moving objects will not be scrambled inside exclusion areas.

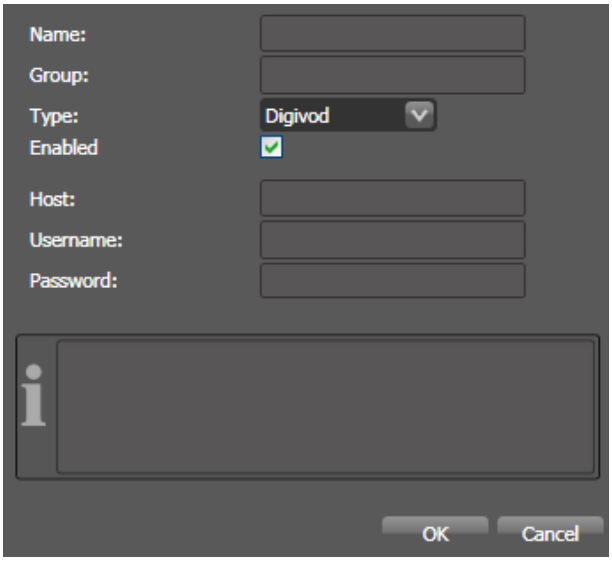
To modify existing exclusion areas first choose ‘Selection’. Use the right mouse button to select an area. A selected area can be modified by moving and adding / removing polygon points. Use the right mouse button to delete existing polygon points. Use the left mouse button to add more polygon points. A selected polygon point can be freely moved by while left mouse button is down. Select an exclusion area in its center and hold left mouse button down to move the whole area. Press the right mouse button to open a context menu that offers selection and deletion of existing objects.

8.3 External sources (Multi-Location edition only)

In this tab, you may set parameters for external sources (external digivod® systems). The summary will display all created external video sources and their current status.



Click Add to create a new external source. Click Delete to delete the marked external source. Doubleclicking a row or clicking the Edit button starts the parameter dialog for an external source.

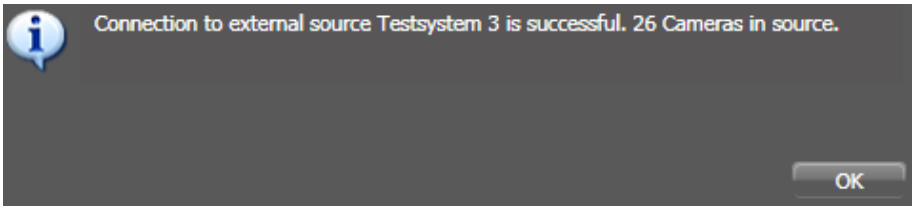


Name	The name you choose for this external system
Group	The group within the navigation tree into which you want to integrate this system.
Type	Type of the external video source (i.e., digivod®)

Activate	Activates or deactivates an inclusion of this external video source
Host	Server name for accessing the external system
User	User of the external system who will be used for this connection
Password	Password for this particular user of the external system

Once you have finished entering all your required information please confirm with OK.

Now your system will establish a direct connection to the external video source and, if successful, will confirm the established connection with the following message:



The cameras and views of the external video source will be instantly visible in the navigation tree of the local system and may be used immediately.

With Edit or Delete you can edit or delete the data available for an external video source and thereby its connection.

8.4 CSV import

The optional CSV import enables the automatic import of data such as operation data from an ERP system.

Imported operation data can be assigned to single cameras and views. This allows a direct digivod® access to process associated video data.

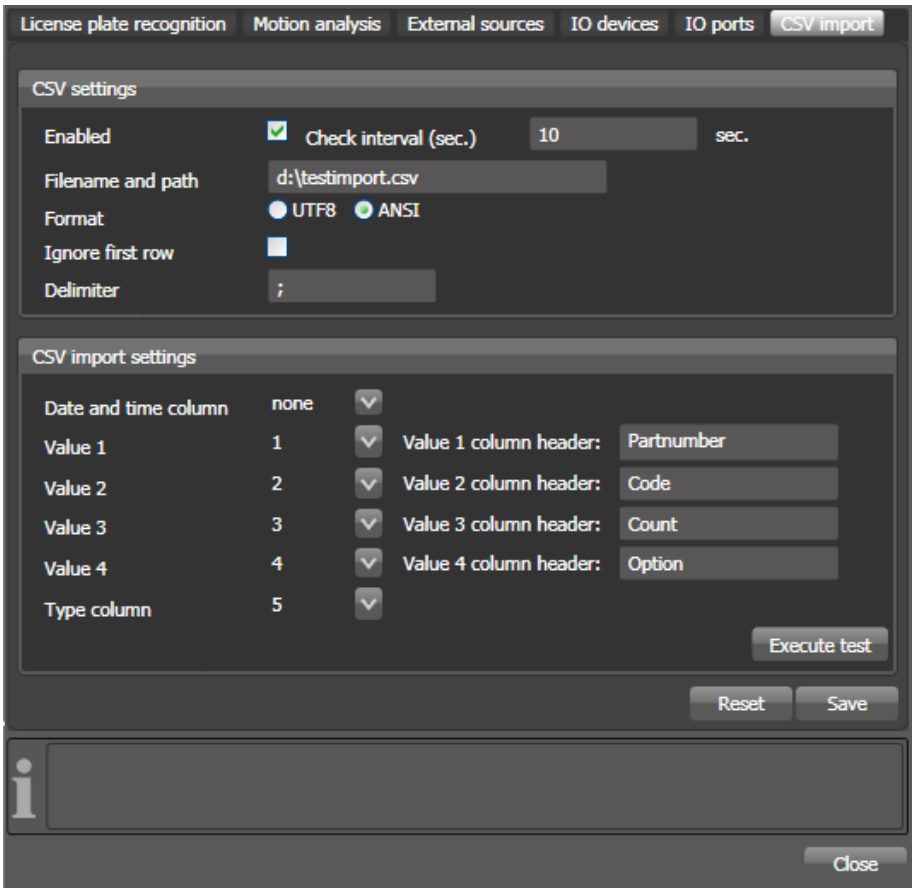
This function imports .csv formatted files from a freely defined folder. The content of this folder is monitored by digivod® in a predefined cycle.

As soon as the system finds new records these will directly imported into the digivod® event database.

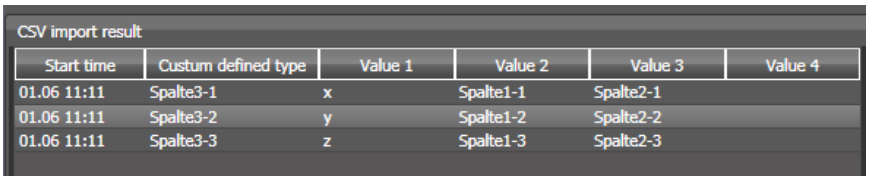
The configuration of CSV import allows a flexible adaption to different record structures. There are four datafields and a record type to be imported per record.

Optionally each record can also contain date and time of the operation data event.

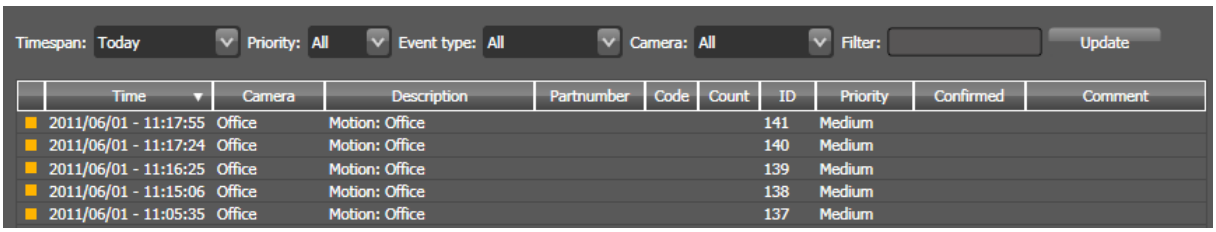
The CSV import parameters are set in the modules administration in the tab named ‘CSV import’.



Enabled	Switches the import on and off
Check interval	Number of seconds between two import runs
Filename and path	Name and folder of the .csv import file **Note:** Instead of a file data can also be imported via COM port e. g. from a scanner In this case you need to specify the connection parameters of the COM port. Please make sure, that the connected device terminates each single record with CR+LF. Example: COM1,9600,8,N,1 Use this string to read data records from a server that is connected to COM1 using baudrate 9600 with 8 databits, no parity and one stopbit.
Format	byteformat in the .csv file (UTF8 or ANSI)
Ignore first row	Activate this, if the headerrow in the file contains the titles and if you don't want to import this as content.
Delimiter	Delimiter charakter that separates the columns within the file
Date and time column	Number of the column that contains date and time. CSV import expects the following data format DD.MM.YYYY hh:mm:ss **Note:** Missing time or missing date (or missing parts of it) will be completed using the timestamp of the import file.
Value 1-4	Number of the columns that contain the data values 1 to 4
Value 1 – 4 column header	Title of value 1 – 4 that will be shown as column titles within the alarm list.
Type column	Number of the column that contains the eventtype; The eventtype may be used to separate different record types within a rule (see Rules – type 'External event').
Execute test	Starts a test import using the parameters as defined above. The result will be shown in a separate window:



Create a rule for ‚External event' and use action type 'View' to assign the imported data to the video data of a single camera or view (see Rules).



8.5 digivod® web access

The optional web access module offers direct video data access (live and archive) as well as alarm access using a HTML5 capable browser. Web access is optimized for mobile clients such as iPhones and Android phones.

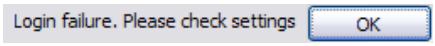
Note: This module does not have an own entry in the menu administration / Modules.

If your digivod® server license contains web access digivod® a HTML5 capable browser can directly access using the URL

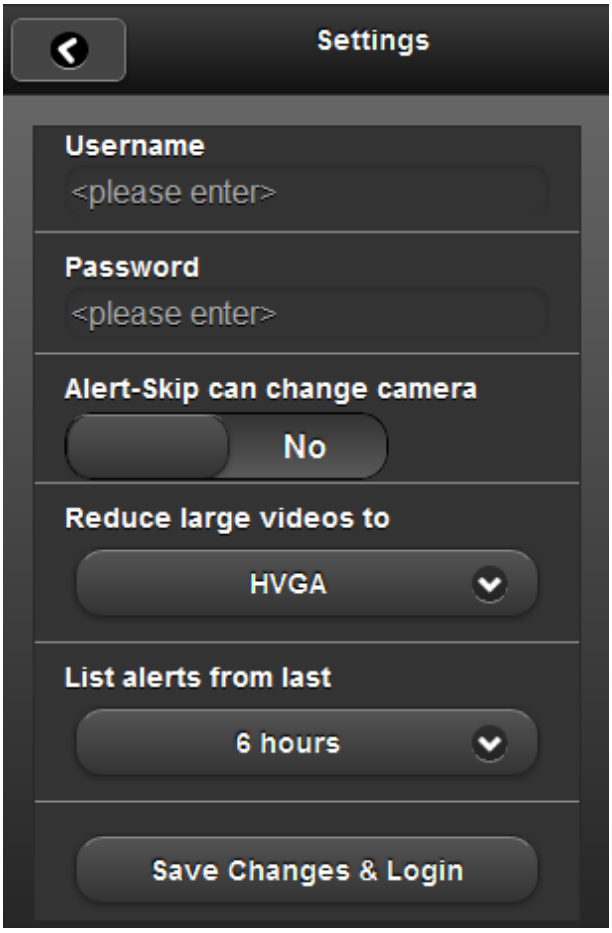
http://<adress of your server>:8180

Note: This access requires port 8180 to be opened on firewalls that are in between client and server.

Note: If there is no web access license on the digivod® Server the above mentioned URL opens the one click installation (see One click installation).

If access data have not been entered the first access causes the following message 

. Follow the hint and open the **Settings** menu to enter username and password.



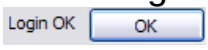
Note: Username and password are case sensitive! Some mobile phone browsers set first letter in upper case by default.

Use the slider below **Alert-Skip can change camera** to define whether and (see digivod® player) jump to previous / next alarm in the system (**No**) or to previous / next alarm of the currently accessed camera (**Yes**).

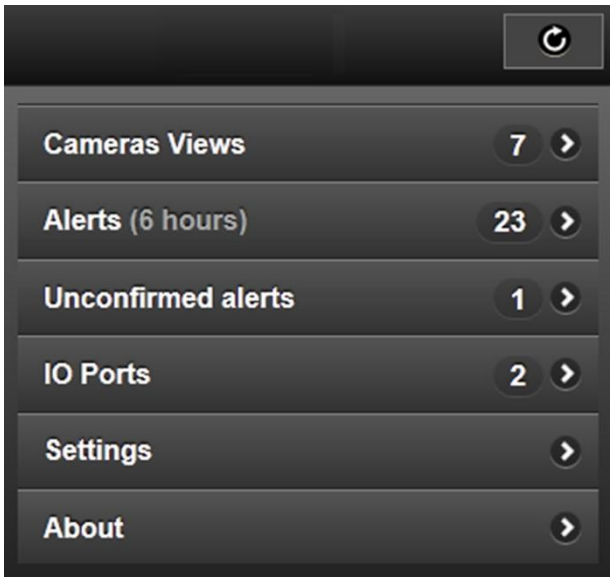
Below **Reduce large videos to** you can set the resolution to which the requested video data shall be reduced. Available resolutions are HVGA(480x320), WVGA(720x400), VGA(640x480), 4CIF(704x576), 720P(1280x720) and Full HD(1920x1080). The resolution reduction reduces the amount of data to be transferred. Depending on the display capabilities of the web access client this reduction may cause a loss of image quality.

Note: While accessing default camera views and multiple views the resolution always will be reduced tot he display resolution of the client. Use **Reduce large videos to** to reduce the resolution below display resolution. **Reduce large videos to** setting does never increase resolution above the physical capabilities of the display.

Use **List alerts from last** to define the timespan that shall be visible when accessing the alarmlist via web access.

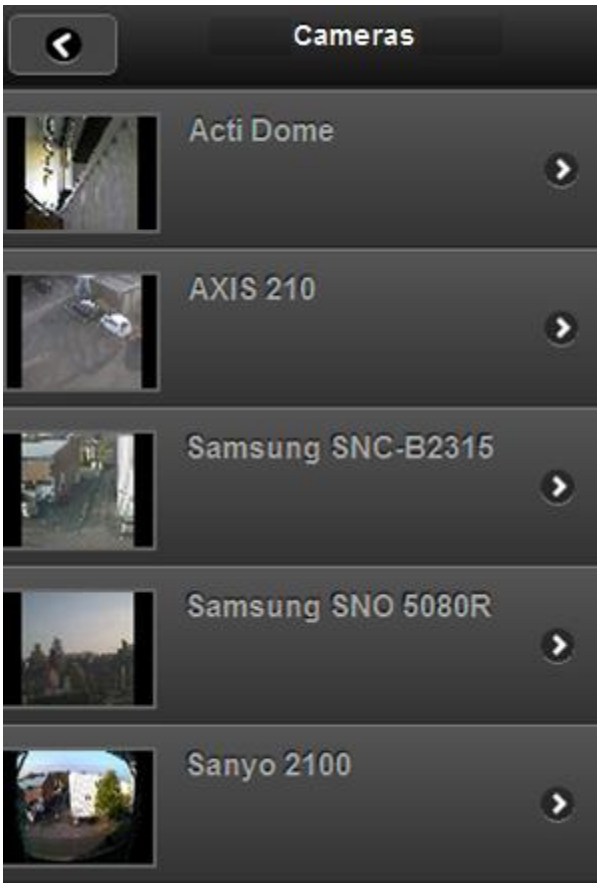
All settings have to be saved with **Save Changes & Login**. The message 

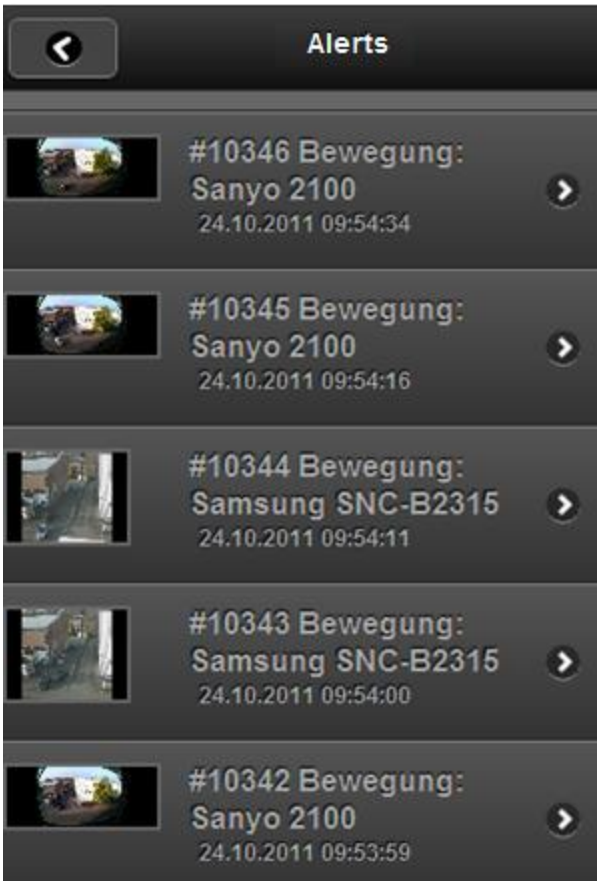
confirms correct settings. Use to exit this menu without changes.



Note: Cameras that have been disabled in the camera administration (see Cameras) will not be listed here. Also alarm of disabled cameras will not be shown in the alarm list.

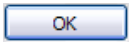
Use **Cameras Views**, **Alerts (6 hours)** und **Unconfirmed alerts** to open the access lists to live views and alarm views.

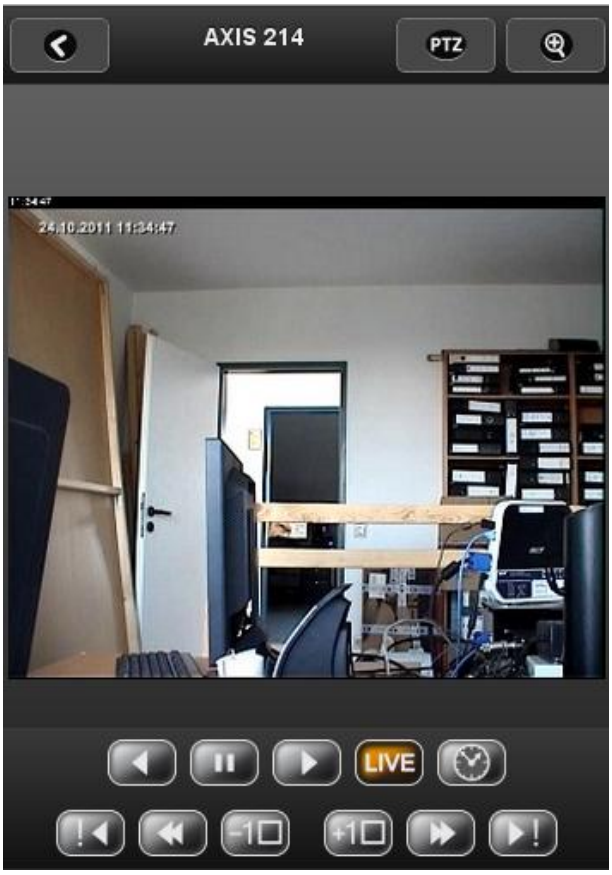




In an open camera view / alarm view you can use the same buttons as they are used in the player to control the view (see digivod® player).

Note: The function of and depends on the settings that have been made below **Alert-Skip can change camera** (see above).

Use to open a window to enter a date/time for a direct archive jump. Use  to confirm and activate the jump.



Use to enter full screen mode. Use browser back function to close this mode. While full screen mode is active video data will be transferred in full resolution. In this mode the digital zoom is available via browser zoom functions.

When accessing a PTZ cameras with enabled PTZ functions (see Cameras) the allows to open the PTZ function menu.

Opens the list of PTZ presets

Use finger scroll or mousewheel to select a row. Press Ok to confirm selection

One step zoom in

One step zoom out

Opens full screen mode

Closes PTZ function menu

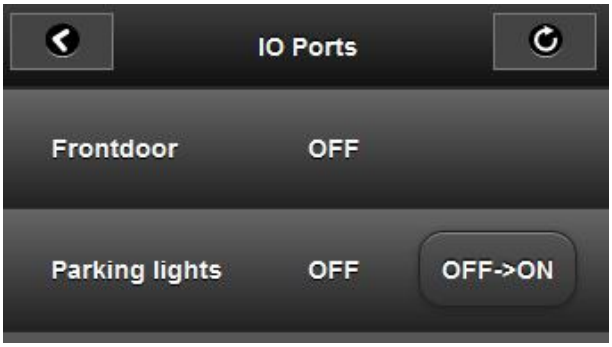
While PTZ function menu is open in a live view you can trigger the pan/tilt functions with single left mouse click or finger touch on a spot within the view. The selected spot will be marked with an orange dot. As far as possible the camera will pan/tilt to make this spot to be the new center of the view.

Note: Each press of zoom in / zoom out will trigger one single camera zoom step. Please take latency times of data transmission and camera reaction into consideration. Quick multiple pressing these buttons may cause an unwanted zoom position.

Note: On touch panels you may use the swiping in an open camera view to move between cameras. Swiping in an open alarm view jumps to the previous / next alarm.

Important: The browser saves username and password. When restarting the browser this allows a direct web access. If you want to delete data from the browser store, use **About** and **Remove Data & Logout**.

Use **IO Ports** to open the web access respectively web visualisation of IO ports (if existing) (see IO ports).



The status of an output port can be changed by pressing OFF->ON respectively ON->OFF. The status of in input port will just be visualized.

Note: When switching an output port there will be no confirmation.

8.5.1 Dynamic DNS

To make a digivod® server accessible via the Internet, the following conditions must be met:

- The server resp. the network itself must have a connection to the internet. Usually a gateway (e. g. DSL-Router) provides this connection.
- IP-ports used for communication between server and clients must be released and forwarded on firewalls in between server and internet clients. (see Firewalls with digivod® and Remote configuration (client/server)
- IP adress or domain name of the server must be known on the client side to ensure that a connection can be established.

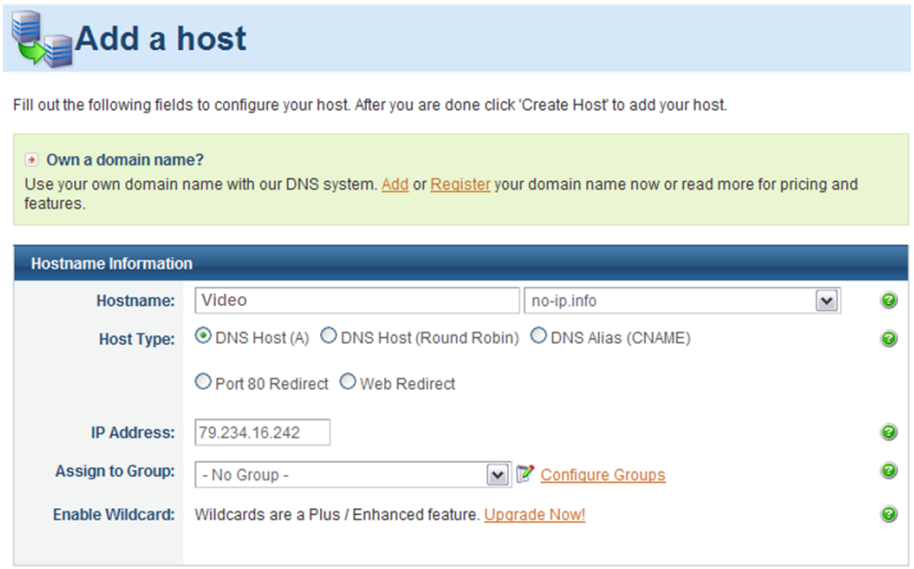
For servers that can be accessed via a fixed IP adress the translation from domain name into IP adress is provided by so called domain name servers (DNS).

For servers that do not have a fixed IP address (e. g. because their internet connection is via DSL with provider disconnection every 24h) a dynamic name service (DynDNS) can be used to make the server accessible via a domain name. Some of these services are free of charge.

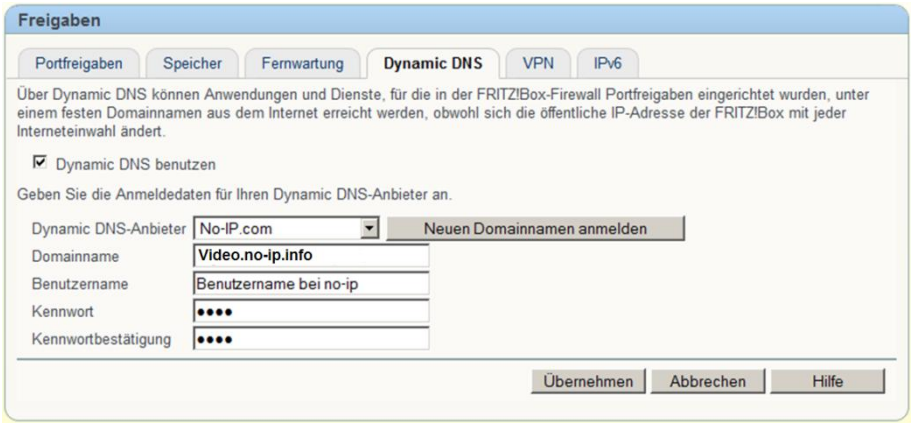
As an example the following pages show the steps to setup a free dynamic name server entry as it is provided by no-ip.com. In principle these steps can also be applied to other DynDNS providers.

1. Access www.no-ip.com
2. Create a new account using Create Account
3. Complete the creation by clicking on the corresponding link in the confirmation-mail.

4. Login to no-ip and select „Add a Host“: Define a hostname and select one of the offered domains. This example shows how to create Video.no-ip.info


Add a host
Fill out the following fields to configure your host. After you are done click 'Create Host' to add your host.
Own a domain name?
Use your own domain name with our DNS system. Add or Register your domain name now or read more for pricing and features.
Hostname Information
Hostname:
Video
no-ip.info
Host Type:
DNS Host (A)
DNS Host (Round Robin)
DNS Alias (CNAME)
Port 80 Redirect
Web Redirect
IP Address:
79.234.16.242
Assign to Group:
- No Group -
Configure Groups
Enable Wildcard:
Wildcards are a Plus / Enhanced feature. Upgrade Now!

5. Activate your DynDNS-update client in your DSL router (e. g. Fritz!Box 7390)



Note: A DynDNS update client ensures that the DynDNS provider (here no-ip.com) gets a notification after a server IP address has been changed. If your DSL router does not include a DynDNS update client you can also install and use a DynDNS update client software on the server. This software is provided from no-ip as well as from other service providers.

After successful implementation of these steps your digivod® server will be accessible on the internet via the selected hostname.

8.5.2 digivod® web access via HTTPS

8.5.2.1 Basics

HTTPS stands for HyperText Transfer Protocol Secure. This protocol is used on the internet to encrypt data traffic.

In addition HTTPS is used for authentification to ensure that communication partners can verify the identity of their counterpart.

By installing a digital server certificate on the digivod® server you can enable HTTPS encryption and server authentication function for digivod® web access.

A digital certificate can either be issued by a trusted certification authority or be self-created.

Certificates issued by a trusted certification authority are accepted and trusted by most browsers without further intervention. When using such a certificate encryption and authentication are directly available. Follow the instructions for certificate creation for Microsoft Internet information Server 7 (II7) when applying for a certificate for your digivod® server at a trusted certification authority.

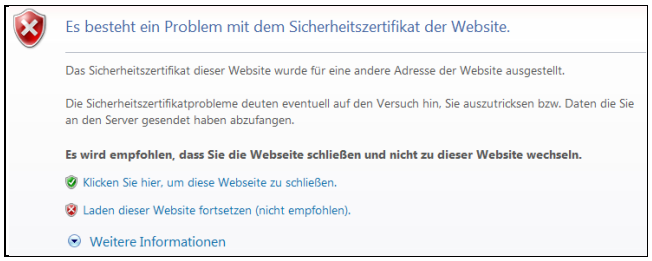
Self-created certificates are free of charge, but browsers do only accept them as to be trusted after manually adding the creator as a trusted root certification authority.

Server certificates must be provided individually for each server. During the setup of digivod® a server certificate named VideoServer-HTTPS will be installed. In principle this can be used for HTTPS but because it has not been created for this specific server browsers will show corresponding warning messages.

A properly configured web access can be accessed via HTTPS if the TCP port 8888 has been released and forwarded to the digivod® server (see digivod® web access and Remote configuration (client/server). Use URL:

https://<adress of your server>:8888

Browsers will show clear warning messages when accessing that address. Ignoring these messages will allow to open the page, but HTTPS authentication feature is not available secured.

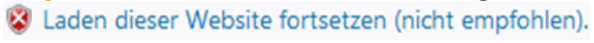

Es besteht ein Problem mit dem Sicherheitszertifikat der Website.
Das Sicherheitszertifikat dieser Website wurde für eine andere Adresse der Website ausgestellt.
Die Sicherheitszertifikatprobleme deuten eventuell auf den Versuch hin, Sie auszutricksen bzw. Daten die Sie an den Server gesendet haben abzufangen.
Es wird empfohlen, dass Sie die Webseite schließen und nicht zu dieser Website wechseln.
Klicken Sie hier, um diese Webseite zu schließen.
Laden dieser Website fortsetzen (nicht empfohlen).
Weitere Informationen

Dies ist wahrscheinlich nicht die Website, nach der Sie suchen!
Beim Versuch, <adresse Ihres Servers> zu kommunizieren, haben Sie einen Server erreicht, der sich VideoServer-HTTPS nennt. Dies kann an einer fehlerhaften Konfiguration liegen, jedoch auch schwerwiegendere Ursachen haben. Möglicherweise versucht ein Angreifer, Sie auf eine gefälschte und potenziell gefährliche Version von <adresse Ihres Servers> zu locken. Sie sollten den Vorgang abbrechen.
Trotzdem fortfahren
Zurück zu sicherer Website
Mehr Infos dazu

Note: The screenshots shown in this chapter are german only!

Warning messages of Microsoft Internet Explorers (left) and Google Chrome (right), if you access to your digivod® web access via HTTPS without a server specific certificate (german only).

Important: If once ignored pressing

resp. 

these messages will not appear again in the future. In this case the trusted server authentication for this address is permanently disabled. Without trusted server authentication your browser cannot determine whether it is connected to the correct server.

If the number of client computers using web access to your digivod® server is huge and/or if these clients are publicly accessible it is recommended to install a certificate provided by a trusted certification authority.

If the number of client computers using web access to your digivod® server is small and if these clients are not publicly accessible you can use a self-created certificate instead. The reliability of the own certification authority has to be confirmed by importing the public key into the certificate store of each client. This has to be done once per client. The following chapters describe how to proceed in this case.

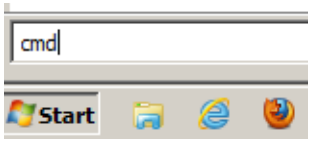
Note: The content of the following chapters if for technical administrators only!

8.5.2.2 How to create a certifiate

During the setup of digivod® two command line programs are installed that can be used to generate a self-created certificate.

Note: The screenshots shown in this chapter are german!

Enter ‘cmd ‘ into the start menu to open a command shell:



Change to destop entering ‘cd desktop’:

```
C:\Dokumente und Einstellungen\User>cd desktop
C:\Dokumente und Einstellungen\User\Desktop>
```

Start makecert to generate a server specific certificate. Use the the following syntax:

makecert –n “CN=Video.no-ip.info“ –sv private.pvk public.cer

Important: You must run makecert on your digivod® server!

Note: Enter the internet adress of your server behind ‘CN=’!

This command creates a certificate with public key and private key. The certificate is made for the domain ‘Video.no-ip.info’ (CN = common name). The public key will be stored in the file named public.cer. The private key will be stored in the file private.pvk.

Note: Further options using makecert can be found here:
http://msdn.microsoft.com/en-us/library/bfsktky3(v=vs.71).aspx

Makecert will prompt `Succeeded` to confirm the creation.

Before this certificate can be loaded into the certificate store of the Microsoft Internet Information Server 7 (IIS7) on your digivod® server the two parts of the certificate have to be joined into a IIS7-compatible file format.

Start pvk2pfx using the following syntax:

pvk2pfx –pvk private.pvk –spc public.cer –pfx Zertifikat_Video.no-ip.info.pfx

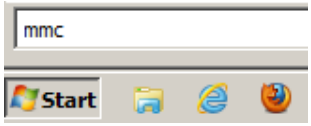
This command joins the two parts that have been created by makecert into a file named Zertifikat_Video.no-ip.info.pfx zusammen.

Note: Use your domain name as file name for this .pfx file.

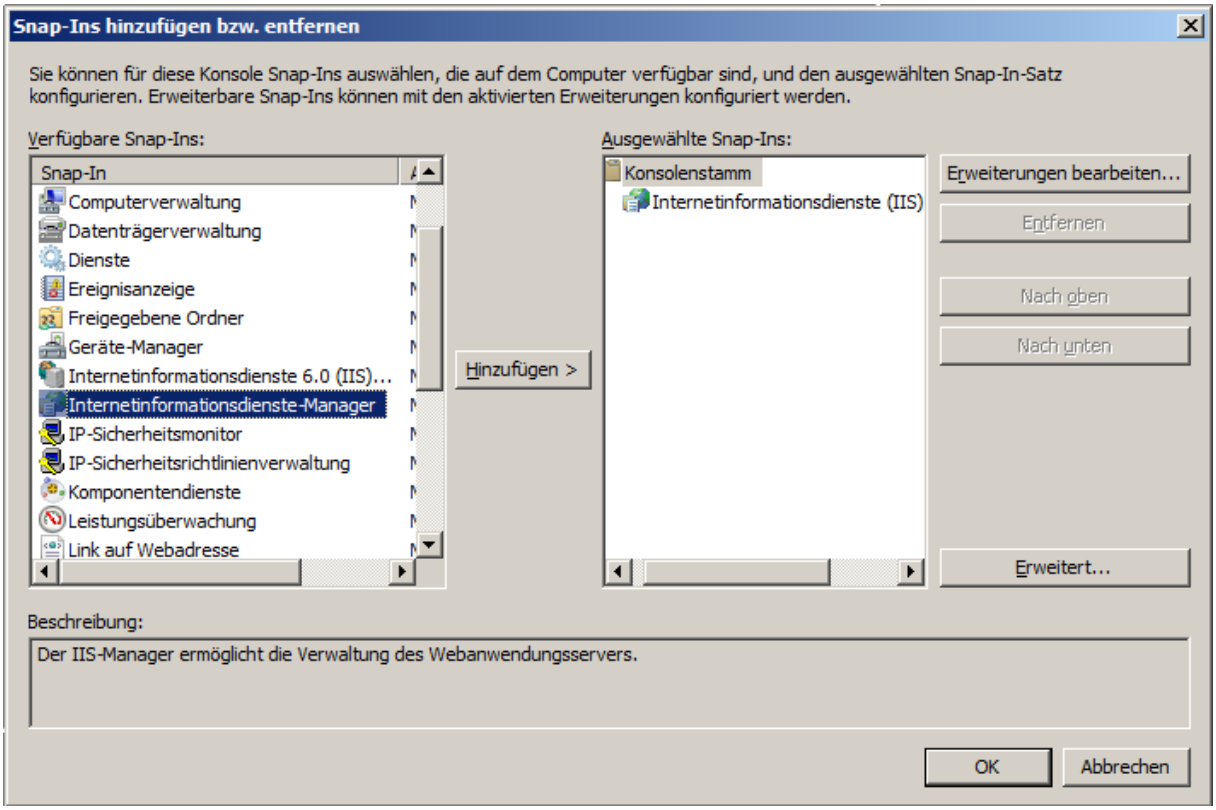
8.5.2.3 Installing a certificate on digivod® server

Enter ‘mmc‘ into the start menu to open the Microsoft Management Console:

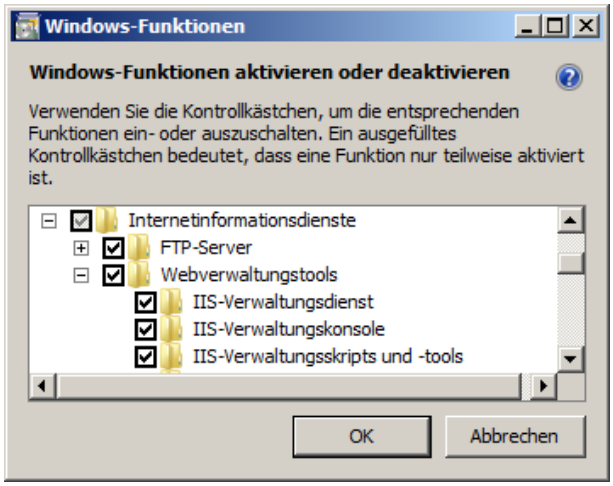
Note: The screenshots shown in this chapter are german!



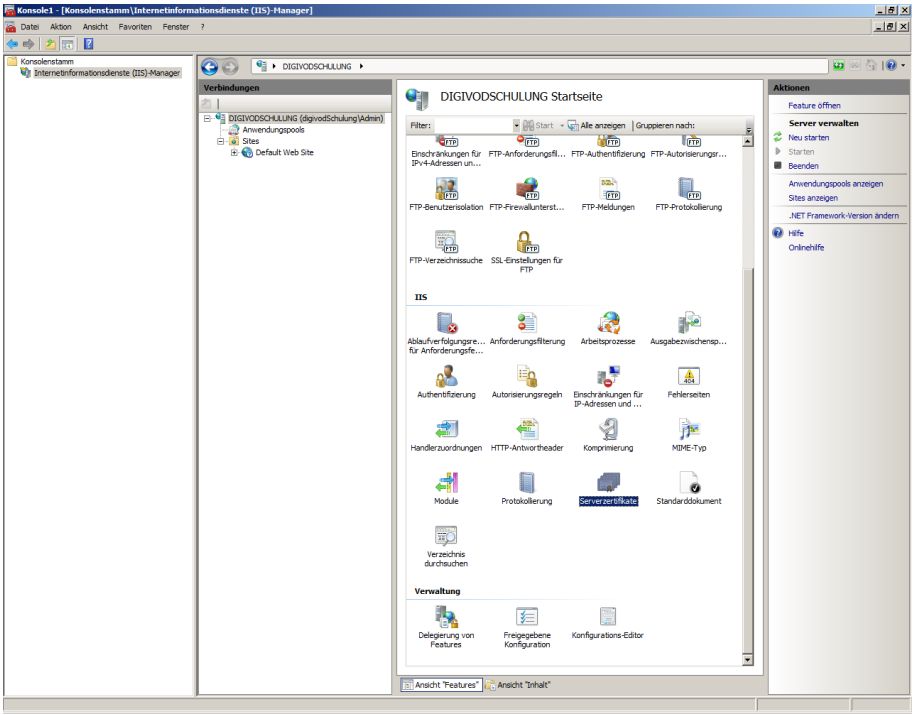
Add Internetinformationsdienste-Manager snap-in:



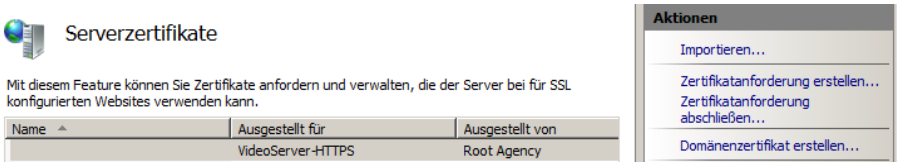
Note: If Internetinformationsdienste-Manager is not available in the list it has to be re-installed. Use ‘Windows Funktionen aktivieren oder deaktivieren‘ from the system control panel:



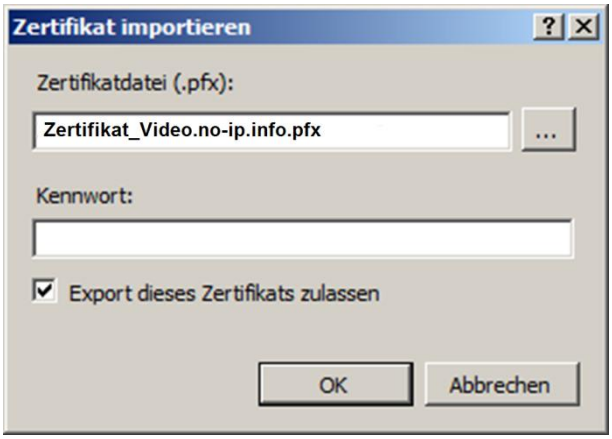
Open the certificate store of you IIS7:



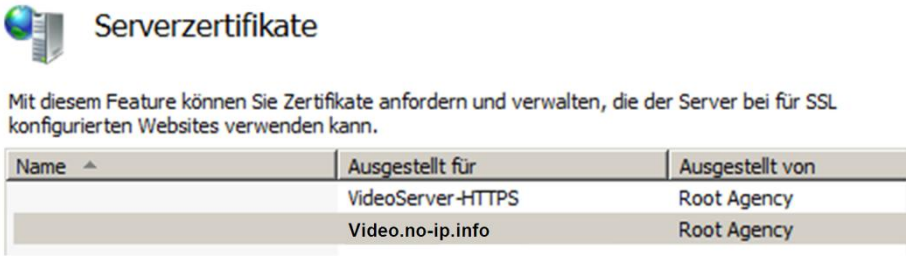
Start the certificate import using



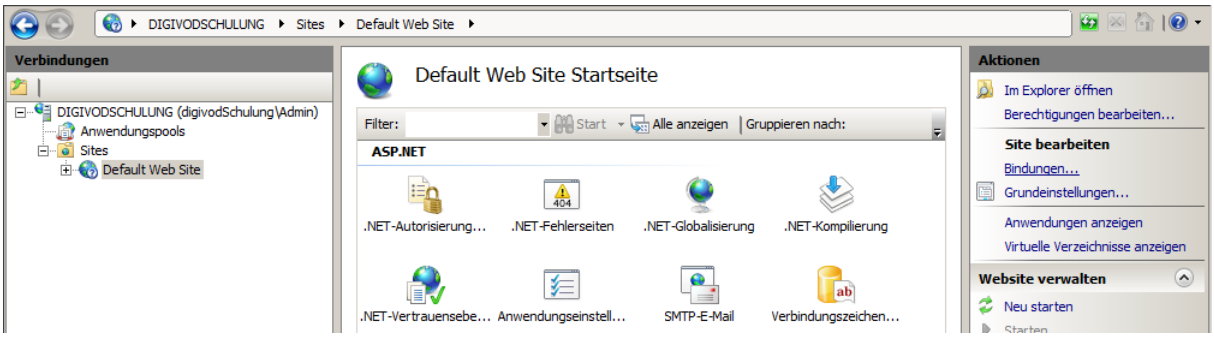
Select the .pfx file to be imported and press OK:



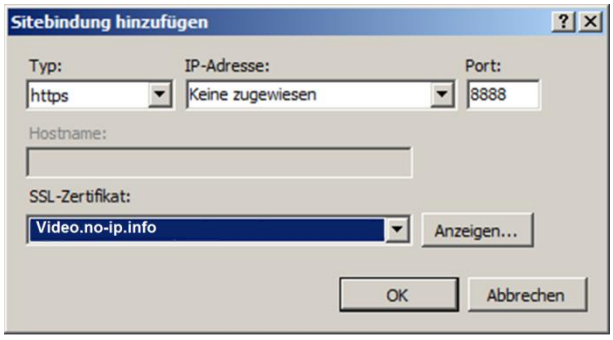
At the end you see the two certificates 'VideoServer-HTTPS' and 'Video.no-ip.info' in the certificate content list of the IIS7 on your digivod® server.



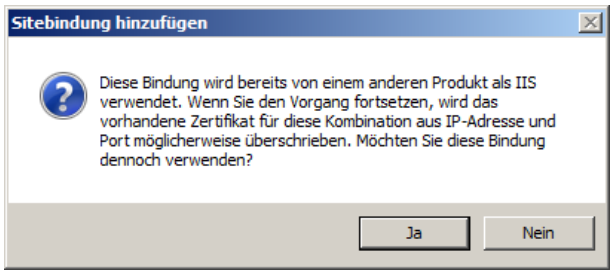
With the last step you have to create a binding betweeen the HTTPS-calls via port 8888 (default web site) and the new certificate.



Create the new binding using Bindungen...:



Because there is already a binding with the preinstalled certificate 'VideoServer-HTTPS' you'll see the following message box. Confirm this with Ja:


Sitebindung hinzufügen
Diese Bindung wird bereits von einem anderen Produkt als IIS verwendet. Wenn Sie den Vorgang fortsetzen, wird das vorhandene Zertifikat für diese Kombination aus IP-Adresse und Port möglicherweise überschrieben. Möchten Sie diese Bindung dennoch verwenden?
Ja
Nein

From now on your digivod® server will use the new certificate for encryption and authentication when called via port 8888 using HTTPS.

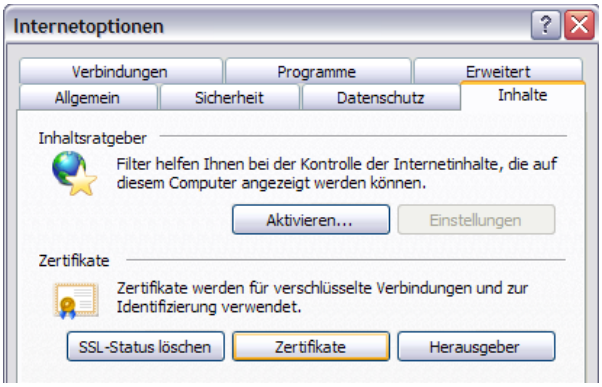
8.5.2.4 Installing certificate (public key) on the client

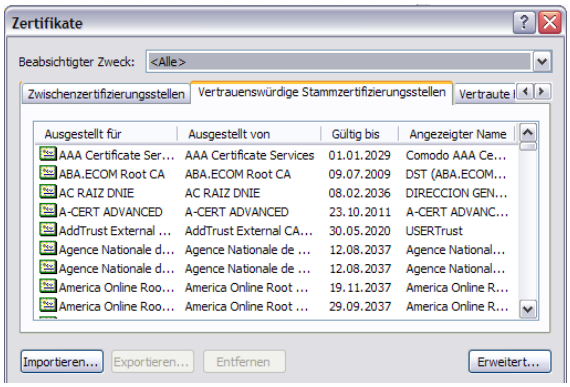
Because the self-created certificate does not come from a trusted certification authority there will be browser specific error messages when accessing the URL:

https://Video.no-ip.info:8888

To avoid this message the issuer of the certificate has to be declared as a trusted certification authority. Import the public key of your certificate - this is file named public.cer (see How to create a certifiate) - into the certificate store of the client. The following steps to do are browser specific.

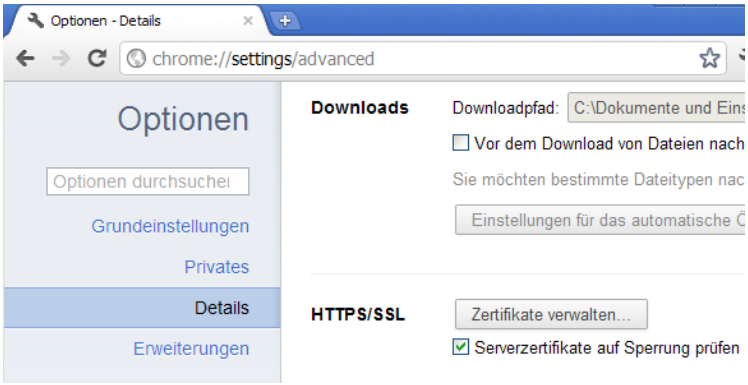
In Microsoft Internet Explorer certificates can be imported in the tab ‘Inhalte‘. Press Zertifikate and then Importieren...:





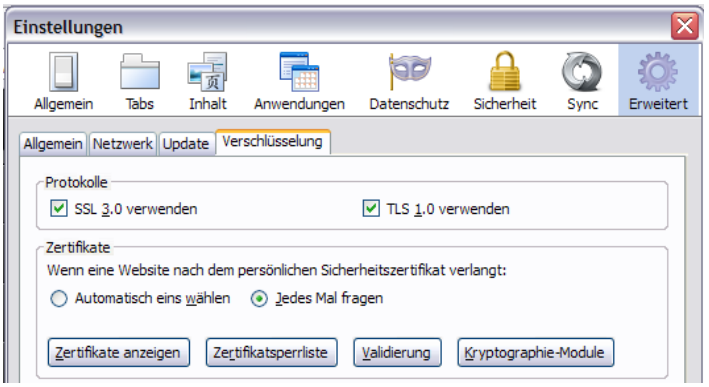
Note: The screenshots shown in this chapter are german!

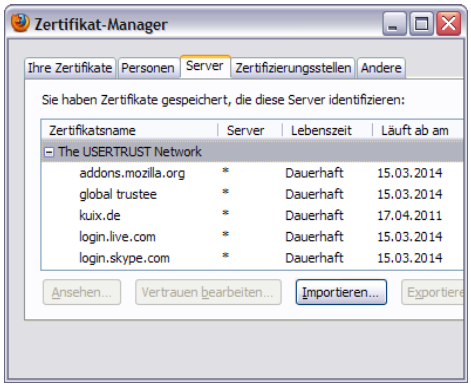
In Google Chrome the certificate management can be started via the ‘Details‘ menu. Select Zertifikate verwalten... and then Importieren.... The import itself ist he same as described above.



Note: Though the manual declaration of reliability Google Chrome will continue to show https://. This shows that Chrome still cannot verify the reliability of the issuer.

In Firefox the browser internal certificate management can be opened from the menu Extras / Einstellungen. Press Zertifikate anzeigen and then Importieren...:





In addition the Firefox certificate manager has a function to manually create exceptions for the browser internal issuing identificatication check. Select the certificate from the list and use Ausnahme hinzufügen... . In the next dialog you confirm the trustworthiness of your own certification authority manually.

Website-Zertifikat-Vertrauenseinstellungen bearbeiten
Das Zertifikat "Video" wurde ausgestellt von:
CN=Root Agency
Weil Sie die Zertifizierungsstelle nicht kennen, die dieses Zertifikat ausgestellt hat, vertrauen Sie der Echtheit dieses Zertifikats nicht, so lange Sie hier nichts anderes angeben.
Zertifikats-Vertrauenseinstellungen bearbeiten:
Der Echtheit dieses Zertifikats vertrauen.
Der Echtheit dieses Zertifikats nicht vertrauen.
CA-Vertrauen bearbeiten
OK
Abbrechen

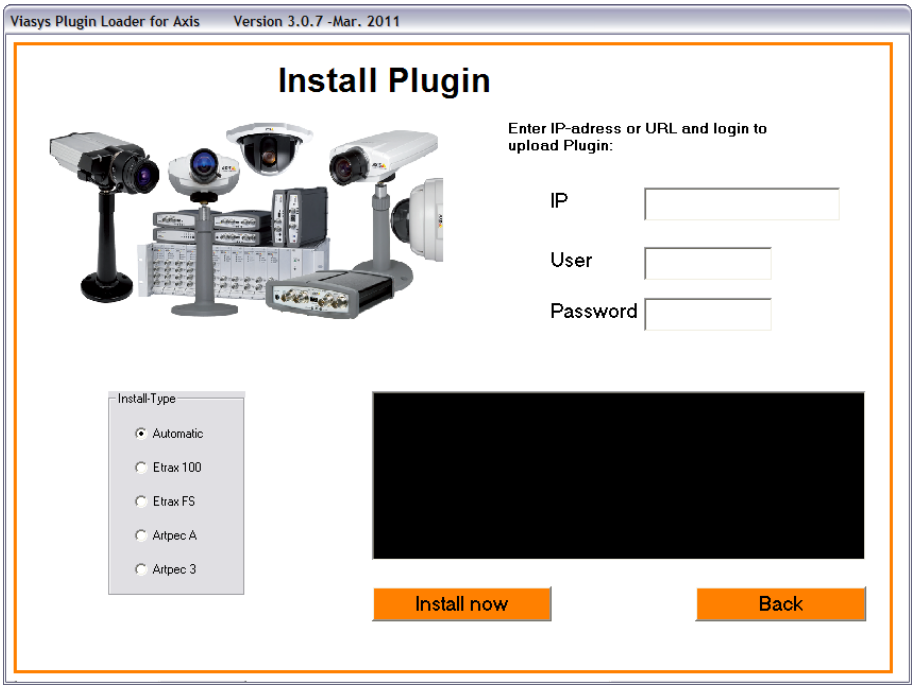
8.6 Alarmsensor plugin

The via:sys alarmsensor plugin is an optional module that can be installed on Axis IP-cameras and videoservers. It is fully supported in digivod®.

Note: This module does not have an own entry in the menu administration / Modules.

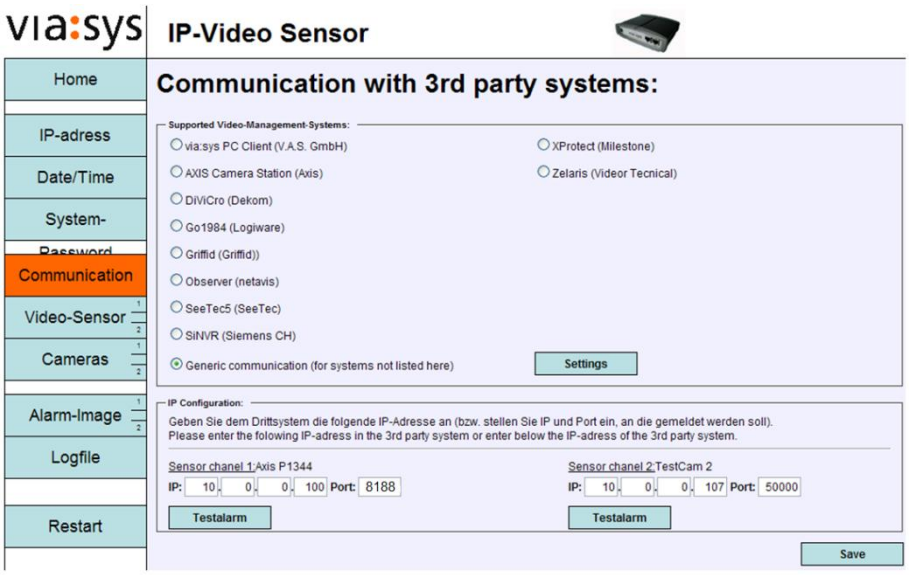
First install the viasys_AxisPlugin_Setup on the computer that you want to use for installing the plugin on the camera(s). Follow the instructions in the manufacturer manual.

After that you can start the viasys Plugin Loader to install the plugin on your camera(s).



Follow the manufacturer instructions to configure the plugin according to your requirements.

To enable digivod® to receive camera motion events (see Rules) from the plugin choose ‘Generic communication’ in the communication menu.



Enter the IP adress of the digivod® server as a sensor channel in the IP configuration. The port is basically arbitrary, but the default port in digivod® is 8188. This portnumber has been released in the windows firewall during the digivod® setup (see Firewalls with digivod®).

Important: If you want o use a port different from 8188 this port must be release on firewalls that might be in between camera and this server. In addition to that this port must be entered in the digivod® server configuration.

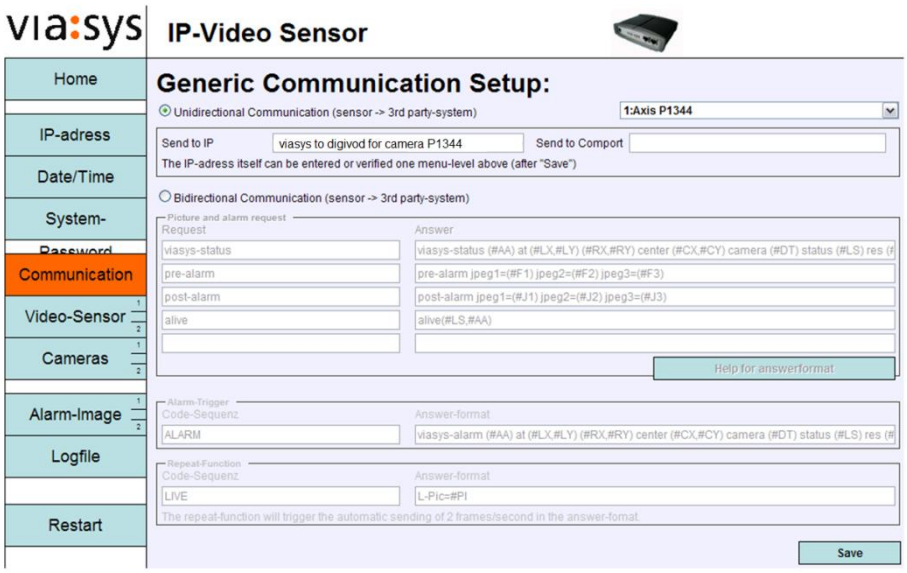
Edit the file VideoServer.Host.Service.exe.config from the digivod® program folder (see Installation and first steps) in administrator mode. Search for ‘Paste’ and enter the following lines behind the line

<!--Paste Individual App Settings from shared.config.dist here -->

```
<setting name="ViasysPort" serializeAs="String">
  <value>your portnumber</value>
</setting>
```

Restart the Video.Service on your digivod® server (see Video.Service). From now on the digivod® server receives camera motion events that have been triggered by the plugin. These events can be used in an alarm rule to trigger an alarm (see Rules).

In the Settings screen choose ‘Unidirectional Communication’:



Important: The field behind ‘Send to IP’ must not be empty! This text will be stored in the digivod® logfiles and it should contain a note on the triggering camera.

Note: Events that have been triggered by the alarmsensor plugin have the same event type like events that have been triggered by the camera internal Motion detection (see Video sensor (Motion detection)).

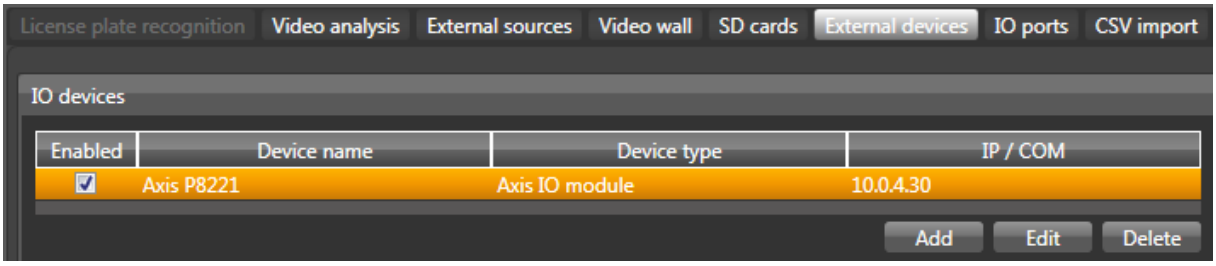
8.7 External devices

In this tab, external devices will be installed and administered. The list shows all external devices already installed.

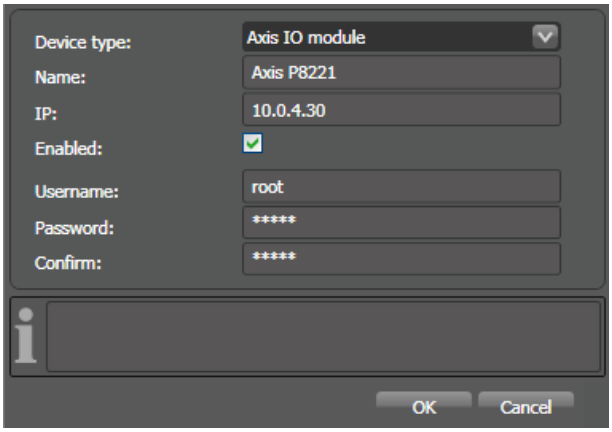
With the button Add you will get into the dialog box for installing new external devices. With Delete the device highlighted in the list can be deleted. By double clicking on a line in the list or using the button Edit, you will get into the parameter dialog box of the highlighted device.

8.7.1 Axis IO module

Before the IO ports (see IO ports) of an Axis IO module can be used in digivod®, the device has to be installed as external device. Camera IO ports can be used directly, i. e. cameras need not be installed again as external devices.



Note: Deleting an external device also deletes all IO ports located on this device.



Device type	Type of the external device
Name	Name that shall be used for this external device
Enabled	Activates respectively deactives this external device
Username	User that shall be used to connect to this external device

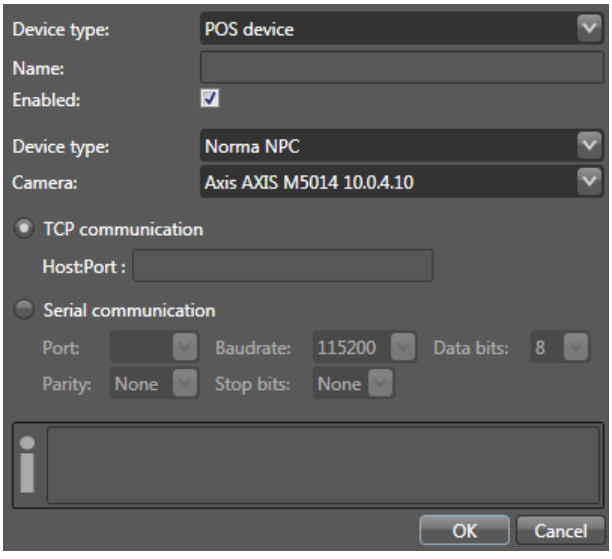
Password Confirm	Password and password confirmation for this user

8.7.2 Point of sales interface (POS)

By using a checkout module (also POS device for point of sale), data of an electronic point of sale can be transmitted to digivod® and assigned to the video data of a camera.

The POS device is installed as an external device. It can be connected either via TCP or by a serial interface.

Device type	type of external device to be installed - here POS device
Name	name to identify this external device
Enabled	enables or disables this device in digivod®
Device type	currently only Norma NPC
Camera	Camera to which the data received via this POS device is to be assigned.
Host:Port:	IP address and port under which this POS device can be reached.
Serial communication	Interface parameters for the serial interface to which this POS device is connected.

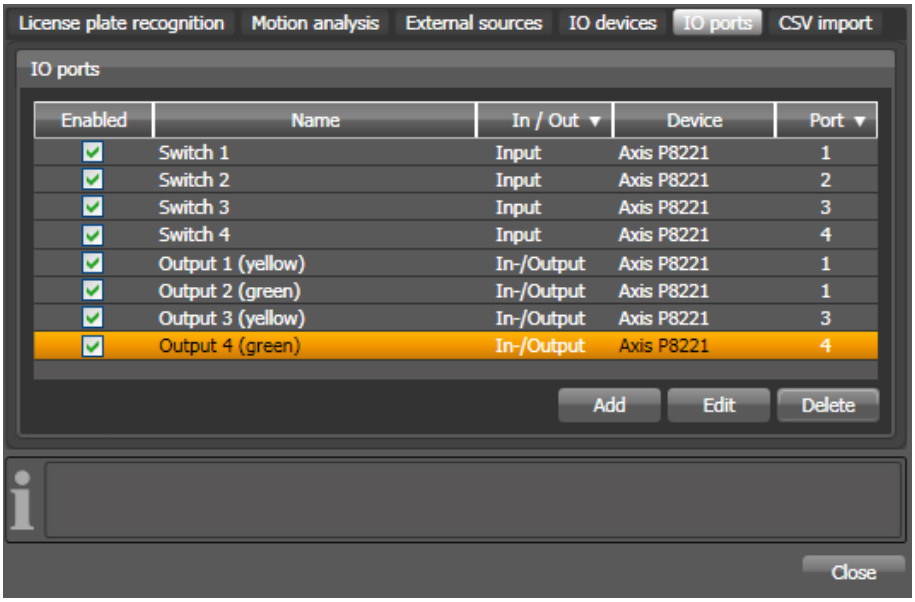


Note: With the event type "POS event“ (see Rules) alert rules for processing POS data can be defined.

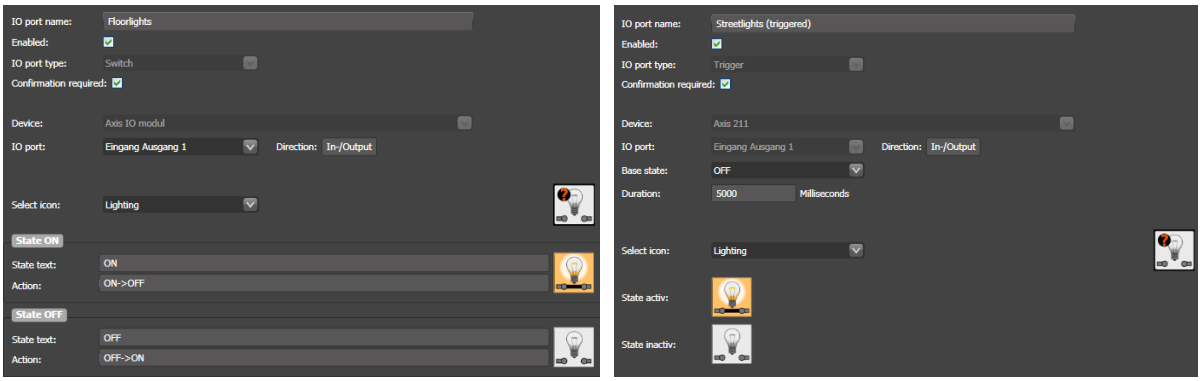
8.8 IO ports

In this tab you may create and maintain IO ports. The list shows the IO ports that already exist.

Note: Before an IO port of an IP-based external device can be used, the device must be created first (see External devices). Camera IO ports can be used directly.



Click Add to create a new IO port. Click Delete to delete the marked IO port. Doubleclicking a row or clicking the Edit button starts the parameter dialog for an IO port.



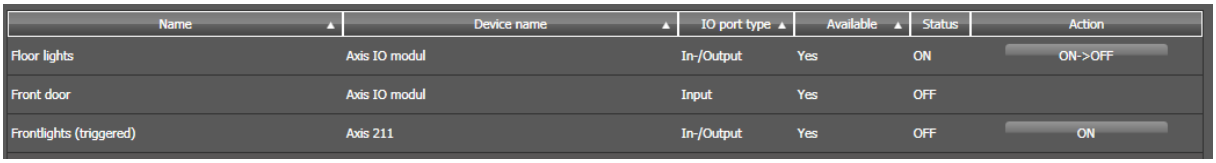
IO port administration for switched ports (left) and triggered ports (right)

Port name	Name of the port
Enabled	Enables respectively disables this port within digivod®
IO port type	„Switch“ defines a input or output port that has a permanent state (left screenshot) „Trigger“ can only be used for output ports. For a triggerport you

	need to have define a base state and a duration (right screenshot)
Confirmation required	Enable this option for output ports if you want the user to enter an additional confirmation when switching this port from siteplans (see Siteplans) or from the IO view.
Device	Select the IO device or the camera where the IO port is located
Port	Select the port on this IO device or on this camera
Base state	(Triggerports only) defines the default state for this port that is active, if the port is not triggered.
Duration (in ms)	(Triggerports only) defines the time in milliseconds that the port is to be switched. After this time the port is automatically set back into the above-defined base state.
Select icon	Select the set of icons to visualize this port within siteplans. The predefined sets contain icons to visualize the status ON, OFF and Unknown. Select Custom to enter three user defined icons. These will be shown on the right side in this mask.
Status ON Status OFF	Define the text that shall be shown in IO view and in siteplans while the port status is ON respectively OFF. The state text will be shown in siteplans when mouse is over the port. It will be shown in the IO view in the status column. The action text will be shown in siteplans when switching this port. It will be shown in the IO view in the action columm.

8.8.1 IO view

As soon as there has been defined at least one IO port digivod® will create a single IO view in the navigation tree (see Navigation tree). This IO-view shows a summary over all IO-ports and their statuses. Output ports can be switched or triggered using the corresponding buttons in the column named ‘Action’.



8.9 SD card recording (general settings)

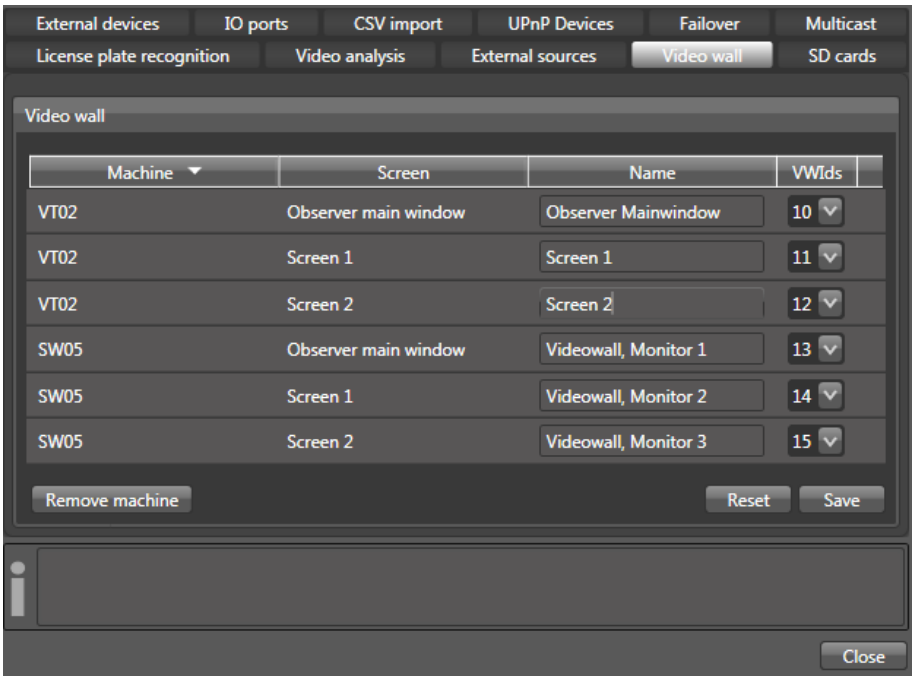
In this tab you may define default settings for SD card recording. These settings will be valid as long as no camera specific settings have been made.

Details about these settings can be found in chapter SD card recording (camera settings)

8.10 Videowall

In this tab, the settings for the single monitors of a videowall will be made. The table shows all clients currently connected to this server and the monitors available on these clients.

In the columns "Name“ and „VWIds“ (Video Wall IDs), logical names and ID numbers for these single monitors the video wall consists of can be defined.



In the navigation tree (see Navigation tree), these monitors can then be selected using the context menu (right mouse button). In the client settings (see Client settings) start views can be defined for the individual monitors.

With Remove machine you will open a drop-down box in which individual connected clients can be deleted from this list.

With Reset all settings can be reset to the defaults values before saving.

With Save the changed settings are saved.

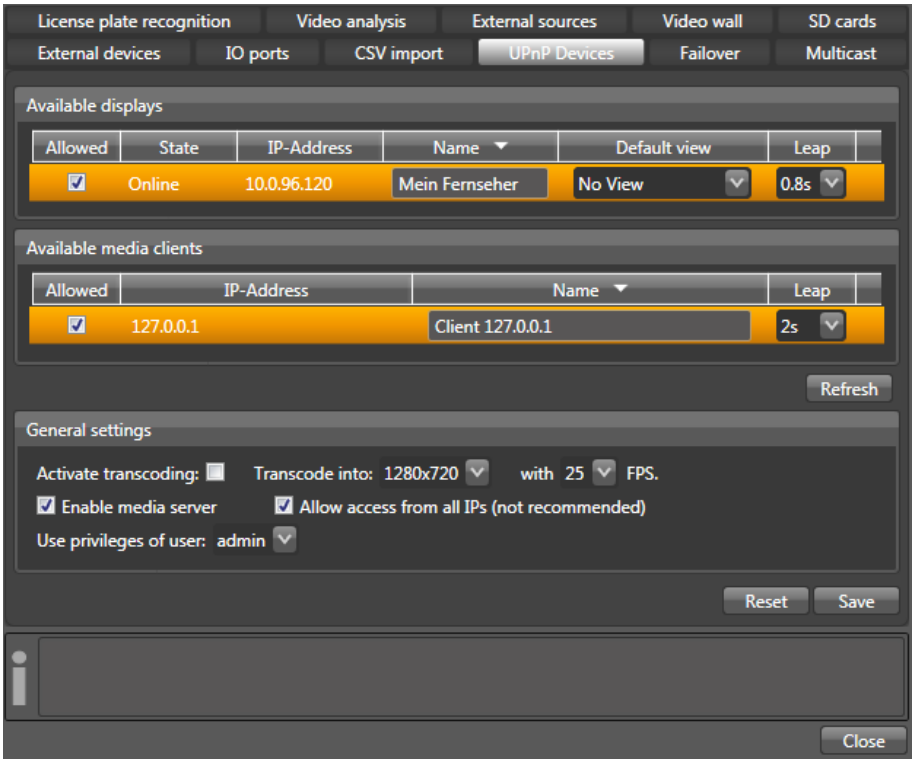
8.11 UPnP devices

In this tab the settings for UPnP devices will be defined. You differentiate between two different types of UPnP devices:

Displays (also renderer or customer monitor): Display units addressable via UPnP (e. g. smart TVs) that are to be controlled like monitors by digivod®.

Media clients: UPnP enabled clients that access the UPnP interface of the digivod® server independently to retrieve live images and alerts.

In the two tables the currently available UPnP devices are shown, grouped into the two device types:



The top table shows the UPnP displays accessible for digivod®. In the column "Name" a logical name can be freely entered under which this display can be selected in the context menu (right mouse button) of the navigation tree (see Navigation tree). In the column "Default view" you can define which camera / view is to be opened automatically when starting this display.

Device-specific output delays (offsets) can be compensated by entering a correction time in the column "Leap".

The bottom table shows the UPnP enabled media clients currently available in the network. So that a media client can access live images and alerts, there has to be a check mark in the column "Allowed" and the digivod® UPnP media server has to be activated (see below). In the column "Name" a digivod® internal logical name can be given for this media client. Also for media clients, it is possible to make up for client-specific output delays (offsets) by entering a correction time in the column "Leap".

Note: For technical reasons the correction times defined in "Leap" can only correct the device-specific output delays after a little more than a one-time lapse of this very correction time after opening a camera / view.

In the general settings the H.264 transcoding of video data before presentation on an UPnP-enabled display can be activated or deactivated with Activate transcoding: . In case of activated transcoding, select resolution and frame rate in which the video data are to be transcoded under Transcode into: 1280x720 and with 25 FPS..

Note: The transcoding of video data might require enormous processing power on the digivod® server depending on the chosen setting and depending on the number of cameras to be displayed.

With Enable media server the UPnP media server will be activated or deactivated. Only when the UPnP media server is activated, UPnP clients can access live images and alerts of this digivod® server.

If you activate the switch Allow access from all IPs (not recommended), instead of individually releasing UPnP-enabled media clients, as described above, all media clients able to access the digivod® server in the network can retrieve live images and alerts. The activation of this option is not recommended!

Important: In the UPnP communication there is no password protected user authentication. Every UPnP media client authorised via its IP address (see above) will have exactly those access rights to live images and alerts in digivod® that the digivod® user selected after Use privileges of user: has. It is strongly recommended to define a separate user with corresponding restricted rights for this, where appropriate (see Users).

8.12 Failover

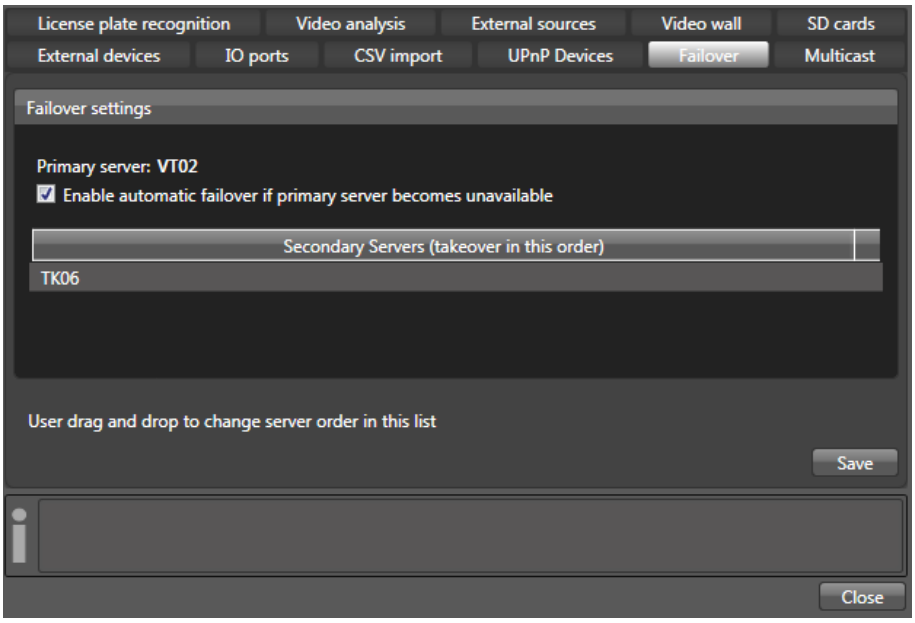
In this tab the settings for failover are defined.

Note: This function is only available or usable in the digivod® ENTERPRISE edition if several recorders exist.

You can distinguish between two failover scenarios:

Failure of the primary server: In case of failure of the primary digivod® server, it is defined in this tab which servers will take over the function of the primary server, and if appropriate in what order.

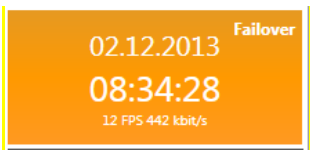
Failure of a recorder: In case of a failure of a recorder (also the primary server can be a recorder!), it will be defined in the settings for the storagesets of this recorder on which storagesets the recordings are to be continued (see Storagesets).



With the failover functionality is generally switched on or off.

Note: The definition of failover storagesets is only possible after the failover functionality has been generally switched on in this tab.

Important: In the observer the orange filling of the data and time display box shows you when the system is in failover mode.

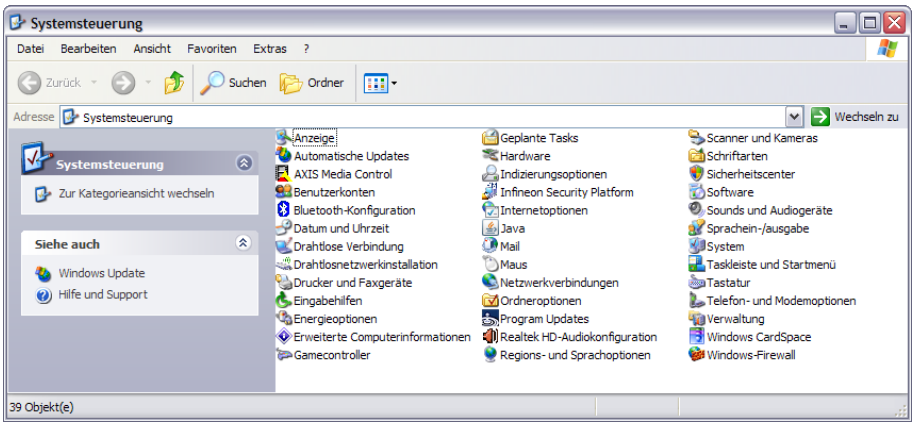


9. Video.Service

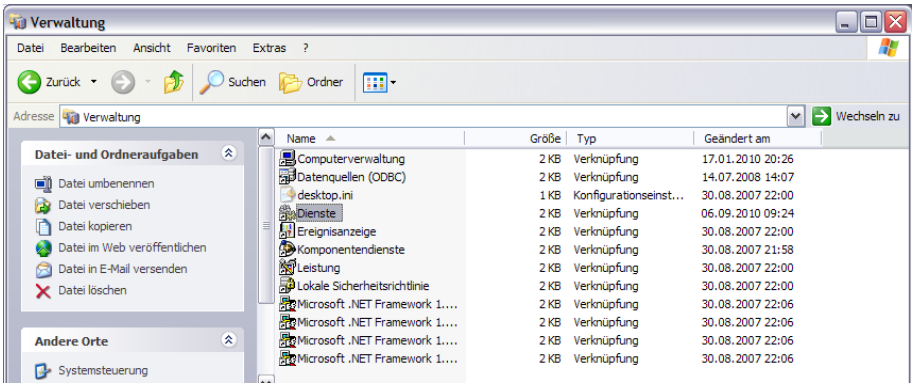
The digivod® service is available as a Windows service running in the background. Its name is Video.Service. It provides central functions for digivod® observer and controls key functions such as Recording (see digivod® recorder) and Cleaning (see digivod® cleaner).

Video.Service will be started automatically after installation, as well as on every system start. Using computer administration located in your control panel, you may also start and exit this service manually, provided the user has logged into Windows as an administrator.

1. Open the control panel using the Windows menu item ‘Start/Control panel’. If necessary, change from ‘Category View’ to ‘Classic View’ by clicking on the corresponding link. Now double-click the control panel module ‘Administrative Tools’ (in the screenshot below it is “Verwaltung” due to a german Windows version) to open it.

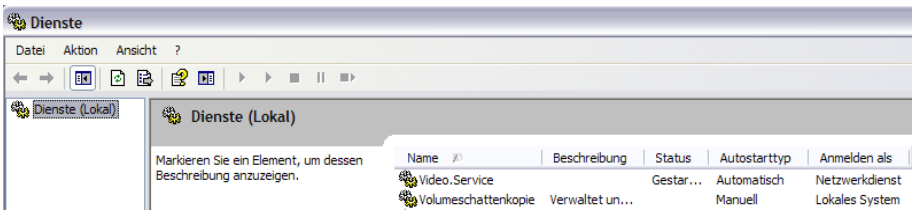


2. Double-click ‘Administrative Tools’ and then double-click ‘Services’ (in the screenshot below it is “Dienste” due to a german Windows version) to open an alphabetically sorted summary of installed Windows Services.

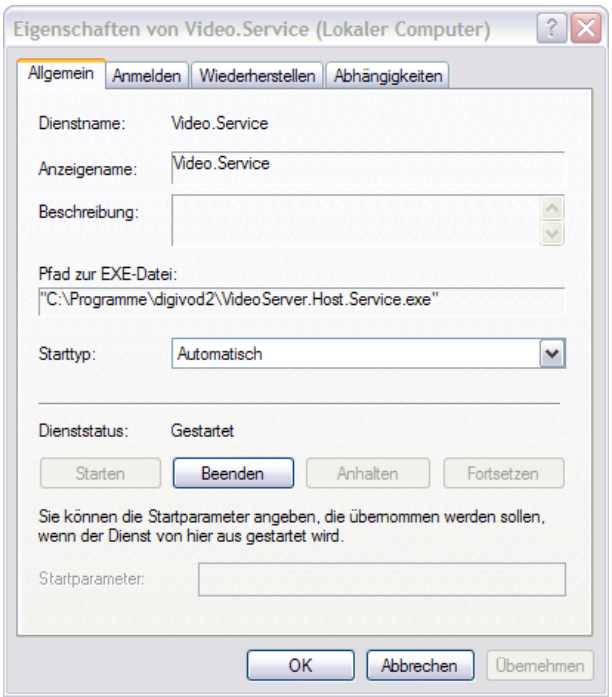

Verwaltung
Datei Bearbeiten Ansicht Favoriten Extras ?
Zurück Suchen Ordner
Adresse Verwaltung
Wechseln zu
Datei- und Ordneraufgaben
Datei umbenennen
Datei verschieben
Datei kopieren
Datei im Web veröffentlichen
Datei in E-Mail versenden
Datei löschen
Andere Orte
Systemsteuerung
Name Größe Typ Geändert am
Computerverwaltung 2 KB Verknüpfung 17.01.2010 20:26
Datenquellen (ODBC) 2 KB Verknüpfung 14.07.2008 14:07
desktop.ini 1 KB Konfigurationseinst... 30.08.2007 22:00
Dienste 2 KB Verknüpfung 06.09.2010 09:24
Ereignisanzeige 2 KB Verknüpfung 30.08.2007 22:00
Komponentendienste 2 KB Verknüpfung 30.08.2007 21:58
Leistung 2 KB Verknüpfung 30.08.2007 22:00
Lokale Sicherheitsrichtlinie 2 KB Verknüpfung 30.08.2007 22:00
Microsoft .NET Framework 1.... 2 KB Verknüpfung 30.08.2007 22:06
Microsoft .NET Framework 1.... 2 KB Verknüpfung 30.08.2007 22:06
Microsoft .NET Framework 1.... 2 KB Verknüpfung 30.08.2007 22:06
Microsoft .NET Framework 1.... 2 KB Verknüpfung 30.08.2007 22:06

3. The ‘Status’ column will indicate whether Video.Service is currently active or not.

Note: If Video.Service has not been started, your digivod® System will not be running. No recordings will be made, and your digivod® observer cannot be started.



4. Double-click on the line ‘Video.Service’ to open a dialogue box with the service’s ‘properties’. You may start or exit this service using corresponding buttons under ‘Service Status’. Furthermore, you can define the service startup type: ‘Automatic’ will start the service every time you will boot up Windows (recommended), whereas ‘Manual’ will require you to manually start the service, or you may also configure another program or service to start it. Lastly, ‘Inactive’ means that even though the service may be started manually, it cannot, however, be started by program request.



9.1 digivod® recorder

The recorder is an integral part of our Video.Service (see Video.Service), recording all the video streams provided by your cameras.

You can define at what times you want your recorder to capture video streams of a specific camera, and what quality these recordings will have, by defining those values in schedules administration (see Schedules for recording parameters) or cameras (see Cameras).

Your recorder's basic settings will be defined in storageset administration (see Storagesets).

The current status of both your recorder and of recording data on all cameras will be displayed in the system status overview (see System state display).

Note: If your computer running digivod® service reboots after having downloaded and installed automatic Windows Updates, any recording processes will be interrupted. It is recommended to deactivate automatic installation of Windows updates on the digivod® server.

9.2 digivod® cleaner

The Cleaner represents another integral part of our Video.Service (see Video.Service) and deletes old video data.

By default the Cleaner runs every 30 minutes and works according to the parameters which have been defined under administration storagesets (see Storagesets). It monitors the specific drives which have been assigned for storing video data.

Two deletion strategies are used at the same time:

1. Deleting data which have reached a certain age
2. Deleting your oldest data once a previously defined low memory threshold has been reached

Note: In case there is not enough memory space available to store your data as described under 1. deleting them as described under 2. might possibly also erase those video data and corresponding database entries which have not yet exceeded your desired data storage time. However, the Cleaner will have to do this to prevent your drive from overflowing.

During archive playback of individual cameras or entire views, when trying to access data which have already been deleted by the Cleaner, the following display will be shown:

Note: This display will even show up if, for other reasons, no video data have been stored for this particular camera and time in the first place (e. g. because the camera was offline).

Note: For smooth operation it must be ensured that there is sufficient storage for storing video data at any time. The size of video data depends on the following parameters: number of cameras, image scenario, resolution, framerate, GOP, compression algorithm, implementation of the compression algorithm and compression rate.

Note: The amount of stored video data between two cleaner cycles must never exceed the threshold for low memory as it is defined in the storageset parameters (see Storagesets).

Note: All storagesets (see Storagesets) that are located on the same volume are summarized when the cleaner calculates its deletion strategy. If there are multiple storagesets on the same volume using different thresholds for minimum storage the smallest is taken into consideration.

10. Technical backgrounds

Note: This chapter is for technical administrators only!

10.1 digivod® config files

Important digivod® parameters are stored in XML-files in the installation directory (see Installation of digivod®).

The naming convention of these .config-files is based on the names of the digivod® components: e. g. observer.exe.config contains parameters of the digivod® observer.

To set up special digivod® configurations these parameters can be modified by administrators.

There are three different ways to do this:

1. manual editing (e. g. using windows notepad)

   Note: This is recommended only for very experienced administrators with detailed knowledge about the application and about XML-structures!

2. digivod® config tool

   This tool, named ConfigTool.exe can be started from the digivod® installation directory. It allows t open the .config files using the select button. The left column shows the name of the parameters that are contained in this file. The right column shows the current value. The values can be edited. For each row there is an infotext that appears in the infobox when marking the line.

   Note: The syntax of the values is very important and mustn’t be changed when editing.

10.2 Observer commandline parameters

Parameter contained in Observer.exe.config can also be temporarily overwritten with commandline (see digivod® config files).

The following parameters (here shown with example values!) can be added to the observer.exe start link. They can also be combined:

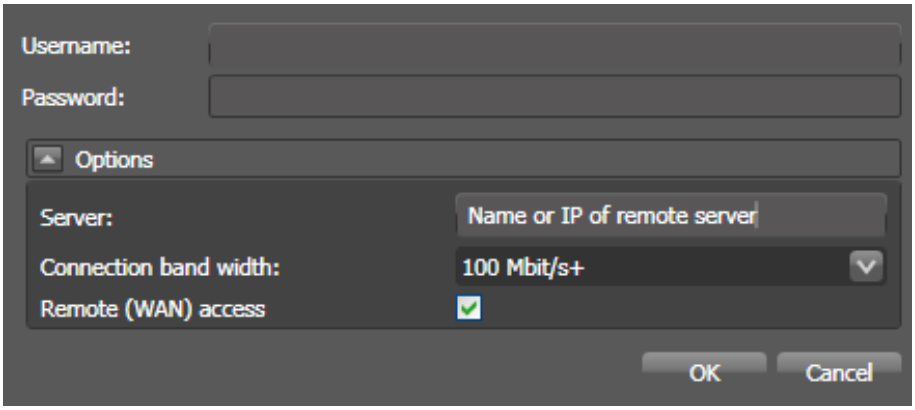
/username admin	digivod® username
/password digivod	password for this user
/host 192.168.1.1	IP adress or name of the digivod® server
/view 1	Automatically open view with ID on the mainscreen
/DisplayForScreen 1 /view 13	Automatically open view with ID 13 as display unit on screen 1
/ConnectionType remote	Set „Remote (WAN) access and activate H.264 transcoding for live and archive viewing (see Starting and exiting digivod® observer)
/NoAlertConfirmationOnStartup true	Don’t show alerts to confirm
/EventListMaxCount 50	Show 50 (instead of 20) entries in the list of incoming alerts
/MainControl_ShowDisplayViewTreeControl false	Kamerabaum ausblenden
/MainControl_ShowIncomingAlertControl false	Don’t show list of incoming alarms
/MainControl_ShowSiteplanControl false	Don’t show siteplans

Please contact your digivod® support for further details.

10.3 Remote configuration (client/server)

The digivod® system has been implemented as a real client/server application. In principle, both components can be installed and operated on the same machine (localhost). For bigger installations it becomes necessesary to split client(s) and server to different platforms. The corresponding options are offered during installation (see Installation of digivod®).

As long as client(s), server and cameras are in the same IP-network the connection can be set up while entering servername or IP-adress in the extended observer login screen in the field server:



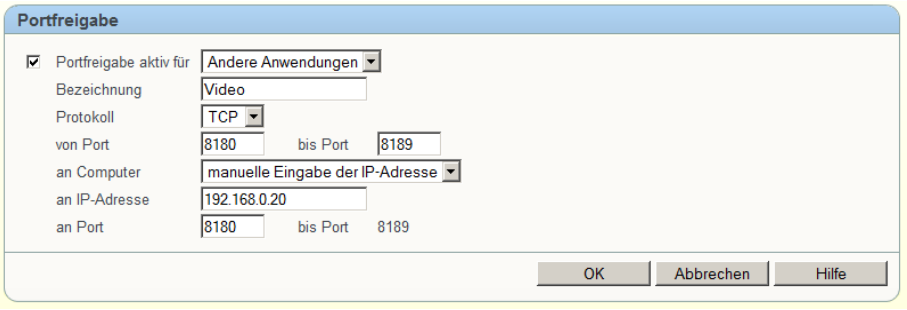
The client will be connected to the server and as long as the user is also known on this server the corresponding access rights will be available then.

Note: In order to enable a remote client to have live access to a camera, the recorder has to be in ‘active’ mode – even if there is no camera to be recorded!

Note: The client/server communication uses an authenticated protocol via TCP ports 8181 – 8189. These have to be released on firewalls that might be in between client and server (see Firewalls with digivod®).

Note: Always check the “Remote (WAN) access” checkbox, when the server access is via a remote connection (WAN - including the internet). If the observer has been started using this option, live views will automatically be transcoded into bandwidth optimized H.264.

As an example it is shown, how to release these ports on a Fritz!Box 7390. (german interface only!) Go to menu ‘Internet/Freigaben‘ and create the following entry in the tab named ‘Portfreigaben‘.



Enter the current IP-adress of the digivod® server in ‘an IP-Adresse‘ because only this will answer incoming requests from the ports between 8180 and 8189.

Note: Port 8180 must be released only when using web access (see digivod® web access) or one click installation (see One click installation).

Note: For the use of digivod® Web Access via HTTPS port 8888 has to be released additionally (see digivod® web access via HTTPS).

Important: Make sure (either using fix IP adresses or corresponding DHCP-settings) that the digivod® server can always be reached under this IP address.

As a result the following entry should be shown in the summary list of port releases:

Important: After this port release in the internet the standard password of the digivod administrator should be changed. Every digivod® client can connect to every digivod® server that answers on these ports!

Important: For the recording the digivod® server uses a RTSP-communication to the cameras via UDP port 554. When connecting to cameras that are outside of the LAN (e. g. via the Internet) it is necessary to release this port too.

10.4 Observer as single application

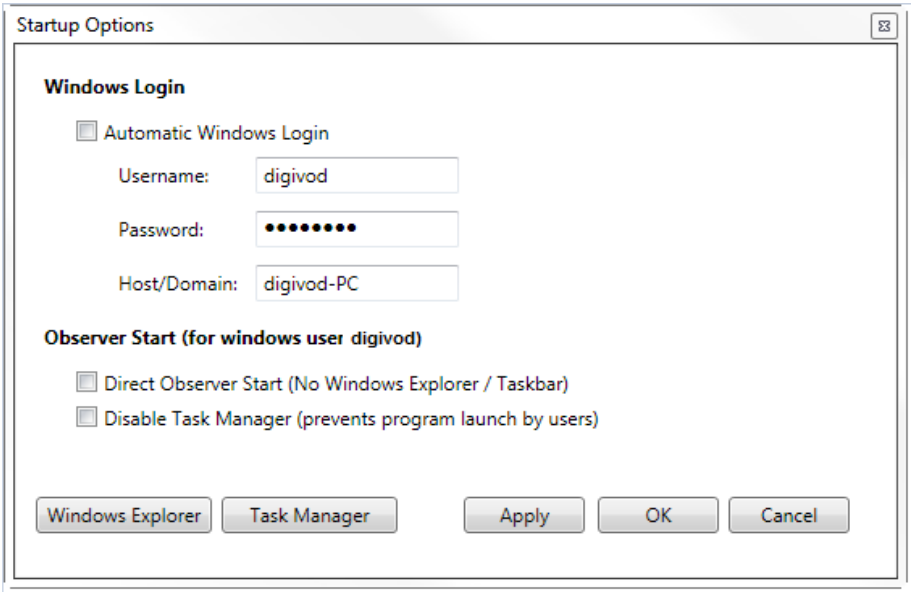
Optionally a digivod® client can be configured to run the digivod® observer as single application after windows startup (operator mode or kiosk mode).

Alternatively a client with several Windows users can be configured to run the digivod® observer as single application for a particular user after windows login. Exiting the digivod® observer will automatically log out from windows again.

To setup one of these single application modes you may use the program ‘ConfigureStartup’ which is located in the digivod® program directory (see Installation of digivod®).

Important: In previous digivod® versions (before 2.8) the visual basic script ‘InstallObserverAsSingleApplication’ could be used to configure the single application mode. This script has replaced the windows shell by the digivod® observer. This script could only be executed if the user for whom the digivod® observer should be made to be the only executable application was already logged into Windows. This user must never be the only Windows user or the system administrator! For compatibility reasons, a script with this name is still available in the program directory but since the version 2.8 this script starts the program "ConfigureStartup" as described below.

To setup one of the two single application modes start ‘ConfigureStartup’ either direct or using the script ‘InstallObserverAsSingleApplication’.



Activate the Checkbox ‘Automatic Windows Login‘ and enter „Username“, „Password“ und „Host/Domain“ to setup the automatic Windows login after startup for this client.

Activate the checkbox ‘Direct Observer Start (No Windows Explorer / Taskbar)’ to setup the automatic digivod® observer start after windows login for the current user.

Important: Never activate this option, if the current user is the only windows user or the system administrator! If you locked out the only windows user or the system administrator from normal system access by mistake, press Shift+Strg+Alt when logging in next time (press these three keys after entering the password but before pressing enter!). This hotkey combination will run ‘ConfigureStartup’ to revert the wrong setting.

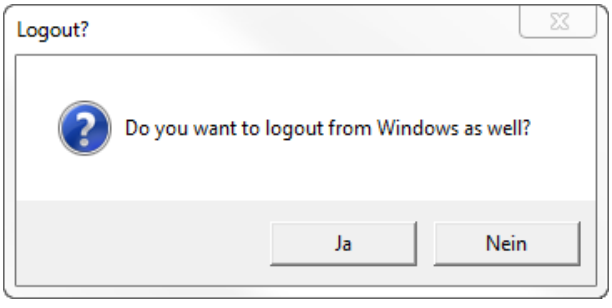
Note: For successful login in digivod® you need to grant the corresponding privileges to this domain user in the digivod® user administration (see Users).

Activate the checkbox ‘Disable Task Manager (prevents program launch by user)’ to prevent that the user can start the task manager by pressing Shift+Strg+Alt.

Note: This option can only be set successfully if ‘ConfigureStartup’ runs in admin mode! The script ‘InstallObserverAsSingleApplication’ cannot run in admin mode.

Press Apply to activate the settings. The program will continue. Press OK to activate the settings and to exit the program. Press Cancel to exit the program without changes.

After OK or Cancel the following question will be prompeted:



Important: The answer Ja will result in an immediate windows logout. Open applications will be terminated, unsaved data may be lost!

10.5 One click installation

Your digivod® Server allows you to apply a so-called ‘one click deployment’ via port 8180.

Note: This feature may only be used in conjunction with Internet Explorer; if required, port 8180 might have to be released in active firewalls (see Firewalls with digivod®).

First, enter the URL of your digivod® server from which you intend to install the client in the Internet Explorer address bar.

http://<adress of your server>:8180

Note: If your digivod® server license contains the web access option (see digivod® web access) the URL mentioned above will start web access. In this case please use

http://<adress of your server>:8180/install.

to start One click installation.

Confirm that you wish to install digivod®. The following window will display the installation progress.

After this, the digivod® observer you just installed will start up, displaying the log-in dialog.

In the start-up directory, a group named ‘digivod gmbh’ will be created. You may then start the observer using the start-up icon „digivod video management“.The digivod® Server which has been used for starting the installation will be defaulted as the server name.

Note: If available, any existing local client installation of digivod® will remain unaffected.

Note: Running your digivod® observer requires you to install the .NET framework in 3.5 version incl. service pack 1. If, for some reason, this should not be installed on the client, it will be installed automatically during the one-click installation process.

Note: Use windows system control / software deinstall to deinstall a digivod® observer that has been installed by one-click installation.

10.6 NTP configuration

By default windows systems use their internal time service (a service named W32Time) to synchronize their own time setting with an external time server.

The digivod® setup modifies some registry settings that allow a digivod® server to become NTP-server (network time protocol) for the cameras.

When adding a camera in digivod® (see General settings) the predefined IP-adress of the NTP-server will be set on the camera. By default this will be the address of the digivod® server. Optionally this address can be set to another NTP-server in the network.

Note: If you want another NTP-server to be set on the cameras (e. g. the network domain server) this must be entered before adding the cameras. After adding the cameras the NTP-server entry can only be modified on the cameras.

Note: Alltime consitent time synchronization between digivod® server and cameras is important, especially if the camera times are displayed. Inconsitent times may cause that video data is useless as a proof of events.

The following settings will be set in the registry database when setting up digivod®:

HKEY_LOCAL_MACHINE\SYSTEM\
CurrentControlSet\services\W32Time\

Name	Typ	Value	Meaning
\Parameters \ReliableTimeSource	REG_DWORD	1	Defines this timeserver to be reliable
\Parameters \LocalNTP	REG_DWORD	1	Ensures the start of the local NTP service
\TimeProviders \NTPserver \Enabled	REG_DWORD	1	Activates server functions of W32Time

Optionally the following entry may be manually set, if W32Time does not start after system reboot:

\DelayedAutostart	REG_DWORD	1	Causes delayed start of W32Time

Important: Manual changes in the registry database can cause the system no longer works properly. Make sure that you have sufficient experience. Create a backup of registry database before changing.

After saving the changes in the registry database the service (W32Time) has to be restarted.

Note: The NTP communication between the cameras and the digivod® server uses the UDP Port 123. This port has to be released on firewalls that are in between. The digivod® setup automatically creates releases for this port on the windows firewall. On other firewalls these have to be made manually.

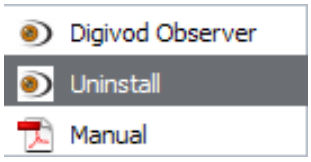
10.7 Changing the hostname

If the hostname of a digivod® servers has been changed you must open the storageset administration for each single storageset and close it with OK again (see Storagesets). This will update the new computer name within the storageset parameters.

11. Appendix

11.1 Deinstallation

If you would like to deinstall the digivod® suite, start the option ‘Uninstall’ from the program group digivod®. Alternatively, you can also uninstall the digivod® suite in the control panel under software.



Note: It is recommended to uninstall the digivod® software before installing an update. (see Installation and first steps)

Note: Using the automatic deinstallation does not destroy configuration data or video data!

A complete deinstallation requires the manual deletion of configuration data after running the ‘Uninstall’. As an option also video data can be deleted. Follow the description given in chapter Manual deinstallation.

Note: A digivod® observer that has been installed by one-click installation (see One click installation) can only be deinstalled via the windows system control using software / deinstall.

A dialog will open up where you can confirm the required deinstallation. If you confirm this dialog, digivod® will be removed from your system. When the deinstallation has been performed successfully it will be shown to you in a dialog box. Click OK to finish the Deinstallation.

If the deinstallation could not delete all components it will show a corresponding dialog box.

11.1.1 Manual deinstallation

For a complete deinstallation these directories have to be manually deleted (after running ‘Uninstall’).

Program files

c:\program files\digivod2 (bzw. c:\programme(X86)\digivod2)
(may have been modified during installation)

Note: This directory can only be removed, if digivod® observer and digivod® service (video.service) are not running.

Configuration data

c:\windows\service profiles\network service\VideoService

c:\videoservice (since digivod® 3.x)

Note: By default the directory \NetworkService is a system folder and it is not visible. Use windows explorer menu ‘Organise / Folder and Search options’ tab ‘View’ to set it to be visible.

Note: For manual deletion of this folder you need to have administrator permissions.

Optionally also video data may be deleted manually.

Video data

c:\Videostreams (changed during the installation (in case of digivod® 2.x) or during the first start (from digivod® 3.x), if applicable)

Note: When deleting the video data manually it is recommended to skip the recycle bin because of the size of video data. Use Shift+Del to skip the recycle bin.

11.2 Notes on the use of USB cameras

When using USB cameras directly connected to the digivod® server, the following notes have to be observed:

- USB cameras can only be installed using the automatic camera search (see New camera (automatic). The manual installation is not possible.
- Each USB camera requires a camera licence.
- USB cameras send a non-encoded video signal to the digivod® server, i. e. the encoding in MJPEG or H.264 will be done by the digivod® Server (see Recording parameters). The CPU load on the server due to this encoding is, depending on the encoder, resolution and frame rate, considerable. For a digivod® server on which two USB cameras are to be used, the following minimum requirements apply:
  - Intel I5 Ivy Bridge or higher
  - 4 GB RAM
  - Notes on the memory calculation for video data
    - For 640 x 480 pixel, 30 FPS, MJPEG approx. 850 MB / hour
    - For 1280 x 720 pixel, 15 FPS, MJPEG approx. 1 GB / hour

    * depending on scenario

12. Support

Telephone support for customers without premium installation support and without software update contract only via

0900 5 104 801

(chargeable, 1.99 € / minute for calls from the German landline
for calls from mobile networks may cost incurred)

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